Non-optimal argumentation: Minimum and maximum constructions

MA thesis submitted by
Nicole Katzir

Prepared under the guidance of
Prof. Mira Ariel

June 2019
# Table of Content

Abstract ........................................................................................................... i
Acknowledgements ............................................................................................ iii
1. Preliminaries .................................................................................................... 1
   1.1 Introduction .................................................................................................. 1
   1.2 Theoretical background ............................................................................. 5
      1.2.1 Construction Grammar ....................................................................... 5
      1.2.2 Scales and argumentation ................................................................. 8
         1.2.2.1 Scalarity and scales .................................................................. 8
         1.1.2.2 Argumentation in language ....................................................... 8
      1.2.2.3 Argumentative scales .................................................................. 10
      1.2.3 Kay's (1992) three English *at least* constructions ....................... 11
   1.3 Motivating a sub-constructional analysis ................................................. 13
2. The Scalar minimum and maximum sub-constructions ................................ 16
   2.1 Construing the maximal complement as a relatively low value .......... 18
   2.2 Construing the minimum complement as a high value ....................... 21
   2.3 The Scalar sub-constructions and discourse profiles ......................... 23
3. Minimum constructions: Rhetorical and Evaluative sub-constructions .......... 25
   3.1 The Rhetorical minimum sub-construction .......................................... 25
      3.1.1 Three types of Rhetorical *at least* ................................................. 27
         3.1.1.1 The Concessive Rhetorical sub-construction ............................. 28
         3.1.1.2 The Restrictive Rhetorical sub-construction ............................ 29
         3.1.1.3 The Evidential Rhetorical sub-construction ............................. 30
         3.1.1.4 Summing up the Rhetorical sub-constructions ....................... 31
      3.1.2 Rhetorical minimum construction as a way to retract overstatements .. 32
         3.1.2.1 Concessive Repair (Couper-Kuhlen and Thompson, 2005) .... 33
      3.1.2.2 The Rhetorical minimum sub-constructions and Concessive Repair 34
   3.2 The Evaluative minimum sub-construction ....................................... 37
      3.2.1 Positive Evaluation ......................................................................... 37
      3.2.2 The Optative sub-construction ...................................................... 39
      3.2.3 The Evaluative minimum sub-construction and argumentation ....... 41
   3.3 Discourse profiles of minimum modifiers ........................................... 42
   3.4 The relations between the minimum sub-constructions ....................... 44
4. Maximum constructions: Rhetorical and Evaluative sub-constructions ........................................ 48
4.1 The Rhetorical maximum sub-construction .............................................................................. 48
   4.1.1 The Rhetorical maximum sub-construction and argumentation .................................... 48
   4.1.2 The Rhetorical maximum construction as part of a larger constructional schema .......... 50
4.2 The Evaluative maximum sub-construction ............................................................................. 52
4.3 Argumentative insufficiency of counter-arguments ................................................................. 53
   4.3.1 Argumentative insufficiency of counter-arguments and concession ............................ 53
   4.3.2 The Scalar maximum construction and argumentative insufficiency .......................... 55
4.4 The discourse profiles of the maximum modifiers ................................................................. 57
4.5 The relations between the maximum sub-constructions ....................................................... 58
5. Discussion and conclusions ..................................................................................................... 61
   5.1 Comparing minimum and maximum constructions ........................................................... 61
      5.1.1 The Scalar sub-constructions ....................................................................................... 61
      5.1.2 The Rhetorical sub-constructions ............................................................................... 62
      5.1.3 The Evaluative sub-constructions ............................................................................... 63
   5.2 Concluding remarks ............................................................................................................ 63
References ...................................................................................................................................... 66
Abstract

This study focuses on constructions associated with superlative modifiers (e.g. *at least* and *at most*). While these expressions have received a lot of attention in the literature recently, researchers often focus on their formal properties. My aim here is to examine their discourse roles, more specifically, their role when used by speakers in constructing arguments for their discourse points. I note that despite their seemingly straight-forward meaning, even the minimum and maximum Scalar sub-constructions present argumentative functions. As such they are intersubjective. Indeed, The Scalar minimum sub-construction construes its complement as pertaining to a value which cannot be construed as unremarkable, and the Scalar maximum sub-construction is restricted to construing its complement as pertaining to non-remarkable values.

My analyses are inspired by Kay's (1992) analysis of three English *at least* constructions: Scalar (1), Rhetorical (2) and Evaluative (3):

1. Mary received calls from at least 3 soldiers.
2. At least this one’s cooked.
3. I see her every day, at least when I’m in town.

Looking at corpus data from HeTenTen, a Hebrew web corpus, I first sharpen Kay's analysis of minimum constructions. I identify an additional sub-type of the Evaluative construction, the Optative sub-constructions. The Rhetorical sub-construction too can be further divided into three sub-types, following Lewis (2000). I argue that they each constitute a sub-construction, and that they are used by speakers to retract overstatements, while maintaining the validity of their original point. More importantly, my main claim regarding the non-Scalar minimum constructions is that they all share the same argumentative function, namely, introducing a weak, yet sufficient argument in favor of the speaker's point.

Next, I offer a first-time analysis of maximum constructions. I suggest that parallel to Kay's analysis of English *at least*, superlative maximum expressions participate in three sub-constructions: Scalar (4), Rhetorical (5), and Evaluative (6)¹.

¹ Note that I define the all sub-constructions discussed in this study based on their distinct discourse functions, and not by reference to the specific minimum or maximum modifier used.
4. beikvot kol kenes yitparsem ma'amar fel 8-10 amudim le-xol ha-yoter. "Following each conference, an article of 8-10 pages at most will be published."

5. ma lanu, yelidei ha-arec, ve-le-alilot dam? le-xol ha-yoter lamadnu alehen be-vet ha-sefer, jinanu et ha-pritim ve-katavnu alehen tfuvot ba-bxinot. "What do we, native-born Israelis, have to do with blood libels? At most, we studied about them at school in history class, memorized their details and took exams about them."

6. hiflaxreru me-ha-tfisa lefiha kir xayav lihiyot lavan ve-haxnisu kcat ceva la-xa'im. maksimum, tamid effar licbo'a fuv axar kax. "Let go of the concept that a wall must be white, and introduce some color into your life. Maximally (Worst case scenario), you can always paint it again later."

The argumentative function of the non-Scalar maximum construction, I argue, introduces the strongest counter-argument against the speaker's own point, while assessing it as in fact insufficient to counter it. Thus, the speaker's original point remains valid.

Using the corpus data, I characterize the discourse profiles (Ariel, 2008) of the two types of Hebrew modifiers. I show that while not absolutely specialized for different functions, some of the differences between the expressions lie in their preference for a certain sub-construction over another, or even for a certain sub-type of a sub-construction.

Finally, I argue that despite their seemingly opposite meanings, minimum and maximum construction ultimately serve speakers in the very same way. Both are used for constructing non-optimal arguments. An optimal argument should be a (i) strong and (ii) positive argument in favor of the speaker’s point. But using a minimum construction, the speaker concedes that there is only a weak argument supporting her point (contra i). Using a maximum construction, all the speaker does is assert that a counter-argument against her point is insufficient (contra ii).
Acknowledgements

First and foremost, I would like to express my deepest gratitude to my advisor, Professor Mira Ariel, for her invaluable support and guidance. Her incredibly vast knowledge and passion for linguistics are a source of inspiration. Working with Mira has been (and continues to be) both a pleasure and a privilege.

I am thankful to Prof. Hava Bat-Zeev Shyldkrot. Through her seminar on language change I was exposed to a great number of ideas which inspired me and shaped the way I think about language.

I thank the faculty members who taught courses I had the privilege to participate in during my B.A. and M.A. studies: Dr. Evan Cohen, Prof. Aya Meltzer-Ascher, Dr. Nirit Kadmon, Prof. Fred Landman, Prof. Outi Bat-El and Prof. Tal Siloni. Each of them has taught me something valuable about linguistics.

I owe many thanks to Ruti Zussman for her great help with dealing with the university's bureaucracy, as well as for her company.

I would also like to thank my friends in the Linguistics department, for helpful discussions and moral support: Hila Davidovich, Noa Geller, Hezi Shabanov, Alon Fishman and Tal Ness. Special thanks to Israela Becker for introducing me to the HeTenTen corpus, and for many interesting conversations about language and linguistics. I also thank anyone who commented on previous versions of this thesis, even if they're not listed here.

Finally, I wish to thank my family. My mother, Nelly, and my grandmother, Ida, who always believed in me and encouraged me to excel. My husband, Erez, for his never-ending love, support and encouragement. And last but also least, my cat, 2.
1. Preliminaries

1.1 Introduction

Superlative modifiers\(^2\) (e.g. *at least* and *at most*) have received considerable attention in the semantic/pragmatic literature recently. Most formal analyses focus on the functions of these expressions as numeral and phrasal modifiers, and on the relation between their formal properties and phenomena such as ignorance inferences (e.g. Krifka, 1999; Geurts and Nouwen, 2007; Büring, 2008; inter alia). But I here focus on their discourse role, where speakers routinely mobilize such constructions in order to present persuasive discourse arguments. Now, discourse points made by speakers are preferably supported by strong, positive evidence. But what should a speaker do if she only has a weak argument for her point? Or if she is in fact aware of a potential counter-argument to her point, which may very well be raised by her addressee?

In the first case, one strategy she could employ is to frame her argument, although objectively weak, as actually *sufficient* for making her point. In the second case, if she cannot outright refute such a counter-argument, the best she can do is demote its argumentative force, by framing it as *insufficient* to undermine her own point. I argue that these are the over-arching discourse functions of all the non-quantificational superlative sub-constructions here analyzed. In fact, even the seemingly objective Scalar sub-constructions have a subjective, argumentative function. The Scalar minimum sub-construction construes its complement in a way which prevents the addressee from assessing it as unremarkable. The Scalar maximum construction on the other hand, construes its complement as not remarkable. These restrictions also apply to the more argumentative discourse functions associated with the other sub-constructions.

The current research is couched within constructionist approaches to language (Fillmore *et al.*, 1988; Goldberg, 1995, 2006; Croft, 2001, inter alia). More specifically, it is inspired by Kay's (1992, 2004) analysis of three uses of English *at least* as three sub-constructions. Kay proposed the following constructions for *at least*: Scalar (1), Evaluative (2) and Rhetorical (3) (Kay's 1992, examples (1)-(3)):

\(^2\)I follow Nouwen’s (2010) typology of modifiers, wherein modifying expressions are classified into seven classes: comparative (*more/fewer than*), differential (*no more than*), superlative (*at least, at most*), disjunctive (*X or more/fewer*), locative (*under/over*), directional (*from, up to*) and other.
1. Mary received calls from at least 3 soldiers.
2. At least this one’s cooked.
3. I see her every day, at least when I’m in town.

As I show, these three sub-constructions are also available in Hebrew. While Kay impressively described both the structural and the meaning aspects of these constructions, I here focus on their argumentative discourse functions. I provide an analysis which is based on naturally occurring data.

Note that there is a remarkable asymmetry in the attention given to minimum and maximum modifiers in the literature. The former have been explored to a notably greater extent (but see Bat-Zeev Shyldekrot, 1995). In this research, I provide, for the first time, a classification of the constructions associated with superlative maximum expressions. I suggest that similarly to Kay's analysis of English at least, superlative maximum expressions participate in three sub-constructions: Scalar (4), Rhetorical (5), and Evaluative (6).

4. beikvot kol kenes yitparsem ma'amir fel 8-10 amudim le-xol ha-yoter.
   "Following each conference, an article of 8-10 pages at most will be published."

5. ma lanu, yelidei ha-arec, ve-le-alilot dam? le-xol ha-yoter lamadnu alehen be-vet ha-sefer, finanu et ha-pratim ve-katavnu alehen tʃuvot ba-bxinot.
   "What do we, native-born Israelis, have to do with blood libels? At most, we studied about them at school in history class, memorized their details and took exams about them."

6. hijtæxreru me-ha-tʃisa lefiha kir xayav lihiyot lavan ve-haxnisu kcat ceva la-xa'im. maksimum, tamid efʃar licbo'a ʃuv axar kax.
   "Let go of the concept that a wall must be white, and introduce some color into your life. Maximally (=Worst case scenario), you can always paint it again later."

Minimum and maximum constructions present interesting parallelisms. All constructions of the same family share the scalar core of the expressions, which marks their complement as the minimal
or maximal value on some scale. Additionally, each family of constructions shares an argumentative discourse function, in that all construe an objective reality in a way that directs the addressee to drawing certain conclusions, usually in a way that would reinforce the speaker's point. The minimum Scalar sub-construction prevents the framing of its complement as a low value. The Rhetorical sub-constructions enable the speaker to admit that their strong argument does not hold, while at the same time framing their weak argument as sufficient for drawing the conclusion they wish to establish. The Evaluative minimum sub-construction introduces an event which is minimally sufficient for turning the evaluation of a state of affairs from negative to positive, albeit still not optimal.

As for maximum constructions, the Scalar sub-construction marks the complement as pertaining to a nonremarkable value. The other two sub-constructions work to downplay the validity of some counter-argument. The Rhetorical and Evaluative constructions both introduce the strongest counter-argument against a conclusion that the speaker wishes to establish, but at the same time assessing it as insufficient grounds for rejecting the speaker's argument.

The picture emerging from this analysis is that despite their seemingly opposite meanings as phrasal modifiers, minimum and maximum constructions ultimately serve speakers quite similarly. I claim that both are used to construct non-optimal arguments in favor of the speaker's point. An optimal argument should be a (i) strong and (ii) positive argument in favor of the speaker’s point. But using a minimum construction, the speaker concedes that she can only present a weak argument in support of her point (contra i). Using a maximum construction, all the speaker does is assert that a counter-argument against her point is insufficient (contra ii).

I base my analysis on data from HeTenTen (Adler, 2007; Baroni et al., 2009), a Hebrew web corpus, comprised of around 900 million tokens. The data was gathered by a web crawler, and then automatically segmented and tagged for parts of speech. The corpus is powered by SketchEngine, a corpus management and corpus query tool (Kilgarriff et al., 2004). Unless stated otherwise, cited examples are from HeTenTen. Constructed examples are sometimes used in order to sharpen certain points throughout the study. These are marked with ~.

I selected three Hebrew minimum modifiers and two maximum modifiers. The minimum modifiers are lefaxot 'at least', le-xl ha-paxot 'at the very least' and minimum 'minimally/at least'. The maximum modifiers are le-xl ha-yoter 'at most' and maksimum 'maximally/at most'. I randomly extracted a sample of each modifier and tagged them according to several parameters.
Table 1 shows the number of analyzed instances and frequency of each Hebrew expression in the corpus\(^3\). I began with extracting and analyzing 100 instances of each modifier. Since some sub-constructions repeat themselves less frequently, in order to give an adequate account of them I increased the number of extracted instances of certain modifiers.

<table>
<thead>
<tr>
<th></th>
<th>Superlative modifiers</th>
<th>No. of occurrences</th>
<th>Frequency (per 1M words)</th>
<th>No. of analyzed instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum modifiers</td>
<td><em>lefaxot 'at least'</em></td>
<td>300,439</td>
<td>335.35</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td><em>le-xol ha-paxot 'at the very least'</em></td>
<td>13,636</td>
<td>15.22</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td><em>minimum 'minimally/at least'</em></td>
<td>2,710</td>
<td>3.02</td>
<td>91</td>
</tr>
<tr>
<td>Maximum modifiers</td>
<td><em>le-xol ha-yoter 'at most'</em></td>
<td>15,446</td>
<td>17.34</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td><em>maksimum 'maximally/at most'</em></td>
<td>7,332</td>
<td>8.23</td>
<td>102</td>
</tr>
</tbody>
</table>

**Table 1:** No. of occurrences and frequency for each expression in the corpus.

In addition to serving us in identifying the specific sub-constructions associated with these expressions, corpus data allows us to extract information about the frequencies and recurrent co-occurrence patterns of the two expressions. In sections 2.3, 3.3 and 4.4, I present such data on the discourse profiles (Ariel, 2008) of the Hebrew expressions, which show that at least some of the differences between them stem from their preference for one of the sub-constructions over others, and also, in the case of minimum expressions, their preference for a specific sub-type of a sub-construction.

The approach adopted in this study is thoroughly functional and usage-based (Langacker, 1987; Bybee, 1995; inter alia), according to which the cognitive organization of language evolves by generalizations from usage events. Thus, language is shaped by language use, specifically by social interactions between speakers, which is why it is only natural that we have developed

---

\(^3\) Note that the frequencies for *maksimum 'maximally/at most'* and *minimum 'minimally/at least'* are an estimate: since Hebrew *maksimum* and *minimum* are ambiguous between a modifier and a noun meaning ‘the highest/lowest amount’, these instances needed to be sifted out. The method chosen is sampling 200 random instances of each word, counting the number of instances of modifier *maksimum/minimum*, and based on that calculating the estimated overall instances of *maksimum/minimum* as a modifier in the corpus.
linguistic means that allow us to communicate that some states of affairs are valid or invalid for
drawing certain conclusions, all in the service of supporting our argumentative goals. We use
argumentation to constantly influence the cognitive state of our co-interlocutors, which renders it
a fundamentally intersubjective phenomenon (Verhagen, 2005).

The remainder of this chapter presents the key theoretical concepts used in this research
(1.2). I begin with a brief review of Construction Grammar (1.2.1). I continue with a definition of
linguistic scales, and their relation to argumentation (1.2.2). And I present Kay's analysis of three
English at least constructions, which forms the basis for my analysis (1.2.3). In addition, I briefly
introduce the three maximum constructions I identified, and motivate a constructional analysis of
them (1.3).

The rest of this work is structured as follows: chapter 2 discusses both minimum and
maximum Scalar sub-constructions side-by-side, while highlighting their parallel argumentative
functions (2.1 and 2.2). I also present the discourse profiles of the Hebrew modifiers with regards
to these constructions (2.3). Chapter 3 contains detailed analyses of the remaining two minimum
sub-constructions, the Rhetorical (3.1) and Evaluative (3.2). It also presents the discourse profiles
associated with the Hebrew minimum modifiers with respect to these two sub-constructions (3.3),
and a discussion of the relations between the minimum sub-construction within the constructional
network of grammar (3.4). Chapter 4 deals with the Rhetorical and Evaluative maximum sub-
constructions (4.1 and 4.2, respectively), as well as the discourse profiles of the Hebrew maximum
expressions (4.4). The chapter end with an examination of the relations between the maximum
sub-constructions (4.5). Finally, chapter 5 concludes this study with a comparison of the minimum
and maximum constructions presented here (5.1), together with concluding remarks (5.2)

1.2 Theoretical background

1.2.1 Construction Grammar

The theoretical framework adopted in this study is that of Construction Grammar. While
constructionist approaches vary to some degree, they share some core principles. First and
foremost, they all agree that language is made up of grammatical constructions, i.e., conventional
pairings of from and meaning, such that some part of the function cannot be derived from its
component parts (Goldberg, 1995). Thus, for example, the English ditransitive construction (7)-
(8) conveys that the agent caused the patient to receive the object. This meaning is obtained even when the verb in the construction is not a verb that conveys transfer, as is demonstrated by (8).

7. Jo gave Mary a book.
8. Jo baked Mary a cake.

Constructions are not limited to abstract syntactic patterns, such as the ditransitive construction. Words too constitute constructions, as are grammatical categories such as Noun, Adjective, VP, etc. In addition, constructions can be fully specified (e.g. kick the bucket, cat), partially filled (e.g. The X-er the Y-er (Fillmore et al., 1988), the way construction (Israel, 1996)), or unspecified syntactic schemas (like the ditransitive construction and other argument structure constructions).

Later developments of the construction grammar framework expand the definition of constructions above to include pairs of form and function which are predictable, as long as they are repeatedly used, with a high enough frequency (Bybee, 1995; Goldberg, 2006). The latter type of constructions includes highly conventional ways for saying things, such as will you marry me? for proposing marriage, and how old are you? for asking for someone's age (examples taken from Taylor, 2012, and Hilpert, 2014).

Language can be defined as a set of constructions. But it is not merely list of constructions. Constructions are related to each other in a network with a hierarchical structure, where more specific constructions inherit their features from more abstract ones (Langacker, 1987; Goldberg, 1995). Goldberg, 2013, exemplifies this principle with the English PN construction (at school, in prison)

4. The PN construction inherits its structural properties from the more abstract PP construction, which specifies that English has prepositions, and not postpositions. The inheritance relations between these constructions are represented by the chart in Figure 1.

---

4 The reason to treat PN as a construction, is that some aspect of its meaning is not derived from its components. Specifically, the PN construction conveys that some stereotypical role is associated with the subject (Goldberg, 2013): you can only be in prison as a prisoner, not as a prison guard, and in school as a student, not as a teacher.
Figure 1: the network containing the PN construction (adapted from Goldberg, 2013)

Another important aspect of constructions that they allow coercion, namely, they can impose meaning on expressions that are otherwise incompatible with the relevant syntactic or semantic structure (Michaelis, 2004). (8) is a good example: The verb *bake* is a verb of creation, and its meaning is that the subject created the patient by way of baking. The intention of the subject that the patient will be transferred to someone is not conventionally associate with it. However, since the verb *bake* in (8) appears in the ditransitive construction, it is coerced into conveying an (intended) transfer.

This framework is advantageous for the current study, as it provides solid theoretical tools to account for many facts associated with different uses of the expressions analyzed here. Specifically, for the fact that each "use" is conventionally associated with syntactic and semantic patterns, which cannot be attributed solely to its component parts. Additionally, exploring the relations of the sub-constructions within a constructional network opens up the possibility for further insights into the relations between them and the rest of the grammar.
1.2.2 Scales and argumentation

1.2.2.1 Scalarity and scales

Scalarity is a central notion in semantic and pragmatic theory. It concerns the association between the ranking of items along some scale and the linguistic meaning as well as extra-linguistic inferences licensed by grammatical constructions. Generally, we can divide scales into two types – conventional (or semantic), and ad hoc ones. Conventional scales are scales that license logical, context independent, unilateral entailment relations.

The second type of scales, ad hoc scales, encompasses several different kinds of relations, the common denominator being that these relations are context-dependent. That is, they hold in certain contexts, but not in others. The two most notable types of ad hoc scales are pragmatic scales (Fauconnier, 1975) and argumentative scales (Ducrot, 1980). Ad hoc scales reflect what people see as typical states of affairs in the world\(^5\). For example, a scale of items ranked according to their weight can license the inference that if Alexei can lift an object that weighs \(x_n\) (say, a television), he can also lift an object that weighs \(x_{n-m}\) (e.g. a book). This is because according to way we see the world, when individuals are able to lift some object, they are typically also able to lift lighter objects. The entailment is not strictly logical, because there are states of affairs in which Alexei is able to lift a television, but not a book (if the book is covered in oil and slippery, for example).

1.1.2.2 Argumentation in language

This thesis concerns argumentative strategies, and thus adds to a long list of grammatical phenomena identified as serving argumentative functions (Anscombe and Ducrot, 1976, 1983, and onwards, Ducrot, 1980; Verhagen, 2005). Argumentative orientation is a major concept in Anscombe and Ducrot’s Argumentation Theory (henceforth AT). AT is a non-truth-conditional semantic theory, according to which the basic function of utterances in discourse is not to provide objective information about the world, but rather, to introduce arguments and conclusions. At the basis of AT is the insight that utterances with the same truth-conditional content cannot always be used to support the same conclusions. Consider the examples in (9), uttered in a store regarding a

\[^5\text{In Anscombe and Ducrot’s theory the principles reflecting these typical states of affairs are called \textit{topoi}, and they are of the form the more/less } X, \text{ the more/less } Y.\]
pair of sunglasses. While (9a) can naturally support the conclusion that I should buy the sunglasses, (9b) naturally supports the opposite conclusion, that I should not purchase them.

9.  a. They are expensive, but beautiful.
    b. They are beautiful, but expensive.

In their analysis of French *mais* ‘but’, Anscombe and Ducrot (1977), argue that sentences of the form $p$ but $q$ comprise of two propositions, with opposite argumentative orientations. That is, they each support an opposite conclusion. In addition, the argument introduced by the second conjunct is often stronger than the one introduced by the first conjunct, and thus “wins out”: the ultimate conclusion is the one that is supported by the argument in the second conjunct. The same utterance, however, can be used to support an opposite conclusion, depending on context. *They are beautiful* can be used as an argument in favor of not buying the sunglasses if I'm looking for an ugly-looking pair. In this case, (9a) and (9b) will not be felicitous, because both conjuncts have the same (anti-buying) argumentative orientation.

Note that the examples in (9) present a strategy for introducing a non-optimal argument. An optimal strategy would be to present an argument that is a (i) strong and (ii) positive argument in favor of the speaker’s point. In (9), while the speaker offers a strong positive argument for their own point in the form of the second conjuncts, they also acknowledge the existence of a valid counter-argument (the arguments in the first conjuncts). Constructions such as (9) express a concession relation (Azar, 1997): What (9a), for example, expresses is that although the sunglasses are expensive, I will buy them (because they are beautiful). The focus of this paper is on an altogether different strategy for nonoptimal argumentation. But, as we see in section 4.3.1, concession relations are closely related to the kind of non-optimal argumentation strategies involved in the superlative maximum constructions here analyzed.

It is important to note that argumentation in language is not limited to specific genres where persuasive speech is recognized as crucial. Rather, it is a fundamental part of the way we use

---

6 And see Schwenter’s (2001) analysis of Spanish *como* conditionals, which shows a complex marking of some argument as only sufficient in the specific context.
language. By using argumentative operators, speakers construe *objective* states of affairs as *
subjectively* sufficient or insufficient bases for certain inferences.

### 1.2.2.3 Argumentative scales

In addition to licensing entailments, pragmatic scales can also serve as bases for other argumentative inferences. The ranking of the items on the scale reflects the relative strength of the propositions in which they are embedded (such as *Alexei can lift X*) when serving as arguments for some conclusion the speaker wishes to establish in the discourse. Recall the example with Alexei who lifts objects. We've already established that the propositions in (10) are related to each other by unilateral entailment – (10a) (contextually) entails (10b), but not vice versa. Additionally, speakers may choose to use the propositions in (10) as arguments for certain conclusions, such as 'Alexei is strong'.

10. a. Alexei can lift a television.
    b. Alexei can lift a book.

If we know that someone accepts (10b) as a valid argument in favor of that conclusion, we can infer that the same person would also accept (10a) as valid. More generally, Ducrot (1980) provides the following definition of argumentative strength:

11. p is a stronger argument than q for conclusion C, iff one cannot accept using q for C without also accepting the validity of p as an argument for C, though one can accept p but not q as a valid argument for C (Ducrot, 1980).

The relation captured by this definition is not far from the unilateral contextual entailment that is supported by pragmatic scales. However, while in the case of pragmatic scales the entailment holds between the propositions obtained by combining the propositional function with the scale (such as the entailment relations between (10a) and (10b)), when the speaker uses an utterance with the intention of establishing some conclusion in the discourse, what is relevant to the discourse is the relation between each proposition and that conclusion. When a speaker wishes to establish the
conclusion that Alexei can lift a book by uttering (10a), the inference that the speaker intends for the addressee to draw is that Alexei can (for sure) lift a book. Therefore, B’s response in (12) would be fine in this context. However, when the speaker wishes to establish that Alexei is strong by saying that Alexei can lift a television, B’s response is odd. Despite the fact that it is compatible with the current state of affairs, the inference simply has no discourse role.

12. ~ A: Alexei can lift a television.
    B: ?? Oh, so he can also lift a book.

1.2.3 Kay's (1992) three English at least constructions

Kay presents three distinct uses of English at least, and argues that they are best thought of as three sub-constructions (presented in 13-15). His motivation for a constructional analysis is that each of the three constructions comes with its own set of syntactic and semantic properties.

13. Scalar: Mary received calls from at least three soldiers.
14. Evaluative: This hotel's noisy, but at least it's comfortable.
15. Rhetorical: I see her every day, at least when I'm in town.

For the Scalar constructions, Kay first notes that the complement of at least does not have to be inherently scalar, as long as it can be construed as such as part of a scalar model. I interpret this to mean that at least's complement can be associated with either a conventional or an ad hoc scale.

---

7 A scalar model, as introduced by Fillmore, Kay and O'Connor, (1988), is a formal model used to describe scalar phenomena in a way that captures all types of scales. Since my focus in this study is on the discourse role of the sub-constructions, I leave the formal analysis for future research.

8 Kay adds that the primary semantic function of Scalar at least is the suspension of the scalar implicature that bare scalar items give rise to. According to this view, without the at least in (13), Mary received calls from three soldiers literally means that Mary received calls from at least three soldiers. But in addition, it implicates that Mary didn't receive calls from more than three soldiers (the scalar implicature). What at least does then, is cancel the scalar implicature which leads to the interpretation that Mary received calls from exactly three soldiers.

While the view that bare scalar items are semantically only lower bounded is widely accepted by linguists ever since Horn, 1972, many others reject this analysis, and instead opt for a circumbounded (exactly)
Syntactically, the complement is phrasal, and *at least* can appear before or after it, as long as it's adjacent to it, or to the phrase containing it.

Next, for the Evaluative construction (Anscombe and Ducrot, 1983, had earlier discussed French *au moins* ‘at least’ and called it *au moins modale* 'modal at least'), Kay argues that it introduces an event which is better than some contextually relevant bad or neutral event, but not as good as some other imaginable event. Syntactically, its complement is clausal, and it appears in various positions which are compatible with those of parentheticals (e.g. initial, final and preverbal).

Finally, Rhetorical *at least* indicates rhetorical retreat. This notion is not well defined by Kay (by his own admittance), as it encompasses several distinct relations. In (16), the rhetorical effect is attained when *at least* introduces the evidence on which the speaker relies on when making the first assertion. The same cannot be said about (15), as the speaker's assertion regarding the frequency they see someone is not made with them being in town as an evidential basis.

16. Mary is at home, at least John's car is in the driveway.

As I show in this study, Kay's three constructions are also attested in the Hebrew corpus. However, his work can be further developed. First, as Lewis (2000) notes, the Rhetorical sub-construction can be further divided into three sub-types. I elaborate on that in section 3.1.1. Second, I identify another type of the Evaluative sub-construction, which gives rise to an optative interpretation. This is addressed in section 3.2.2. Finally, I argue that the non-scalar sub-construction shares the same discourse argumentative function – to introduce a minimally sufficient argument in favor of the speaker's point.

Semantic interpretation of numerals and scalar items (e.g. Koenig, 1991; Kadmon, 2001; Ariel, 2004; inter alia). Adopting the latter view renders *at least* almost redundant on Kay's account. This is, of course, not the case. As we'll see, *at least*, as well as other superlative minimum modifiers, contribute to the meaning of the utterance more than an assertion about the lower bound. Additionally, as Kay himself notes, by not adhering to the classical analysis we can better capture the intuitive parallelism between *at least* and *at most.*
1.3 Motivating a sub-constructional analysis

Kay established that the three uses of at least are most adequately analyzed as grammatical constructions. Nevertheless, a constructional analysis of maximum modifiers is not to be taken for granted. This section is aimed at introducing the three maximum sub-constructions I identified in the data: Scalar, Rhetorical, and Evaluative, as well as to motivate a sub-constructional analysis for them. These are illustrated by examples (4)-(6), repeated here as (17)-(19), respectively:

17. beikvot kol kenes itparsem ma’amar fel 8-10 amudim le-xol ha-yoter.
"Following each conference, an article of 8-10 pages at most will be published."

18. ma lanu, yelidei ha-arec, ve-le-alilot dam? le-xol ha-yoter lamadnu alehen be-vet ha-sefer, finanu et ha-pritim ve-katavnu alehen tʃuvot ba-bxinot.
"What do we, native-born Israelis, have to do with blood libels? At most, we studied about them at school in history class, memorized their details and took exams about them."

19. hijtaxreru me-ha-tfisa lefiha kir xayav lihiyot lavan ve-haxnisu kcat ceva la-xa'im. maksimum, tamid effar licbo'aʃuv axar kax.
"Let go of the concept that a wall must be white, and introduce some color into your life. Maximally (=Worst case scenario), you can always paint it again later."

While maximum modifiers seem to be synonymous variants, they are not always interchangeable, nor are their readings invariably identical. First, the maximum modifier in (17) can be felicitously replaced by a truth-conditionally equivalent modifier, such as N o paxot ‘N or less’, gag ‘at most’ (lit. ‘roof’), or lo yoter me N ‘no more than N’. While these variants often occur in different contexts with different discoursal goals (these are, after all, different constructions), a speaker who wishes to report the number of people in the room can choose between these alternatives (among others). The same cannot be said about (18) and (19). Substituting the maximum expression in these sentences with the structurally similar gag ‘at most’, for example, will result in a
pragmatically odd sentence, while trying to somehow paraphrase them with the other two options simply results in ungrammatical sentences.

Second, only in (18) and (19) is there a concessive component in the interpretation of the construction. We interpret the writer as conveying that although Israelis study about blood libels at school, it is not enough to consider them as familiar with libels. Similarly, (19) conveys that although you might need to repaint your walls, you should try and paint them in a color other than white. That is – even the worst consequence of experimenting with color on your walls is not bad enough for you to avoid it. Finally, while the complement in (19) is a negatively evaluated event (re-painting your walls is a negative outcome), the complements of (17) and (18) are not. In neither one of these do the speakers/writers convey their evaluative stance towards the complements.

I analyze the three uses presented here specifically as (sub)constructions because each of them comes with a distinct set of structural and semantic components. The meaning component briefly described above will be elaborated upon in chapters 2 (for the Scalar sub-construction) and 4 (for the other two sub-constructions). Structurally, there are evident differences between the sub-constructions. The Scalar sub-construction is restricted to phrasal complements, while in the other two sub-constructions the maximum expression has clausal scope. Additionally, the maximum expression in the Scalar sub-construction has relative syntactic freedom – it can appear before or after its complement, and it doesn't even have to be adjacent to it. The Evaluative and Rhetorical constructions behave differently – the maximum modifier always precedes the complement, and essentially functions as a connective between its complement and another chunk of discourse (I elaborate more on this in section 4.1.2). Thus, the different structures of (20a) and (20b) alone are enough to distinguish between the Scalar sub-construction on one hand, and the Rhetorical and Evaluative sub-constructions on the other hand (the comma in (20b) represents the fact that at most and its complement belong to a different intonation unit). Because the maximum modifier needs to connect the complement to something, (20b) (but not 20a) is infelicitous when uttered outside of a context in which there is a conclusion that the speaker is trying to establish.

20. a. ~ At most 100 people will vote for this candidate.
b. ~ ??At most, 100 people will vote for this candidate.
While the Rhetorical and Evaluative constructions share the same structure and the same argumentative function of introducing a strong yet insufficient counter-argument, I nonetheless argue that they too should count as separate sub-constructions. More specifically, the Evaluative sub-construction is an instance of the Rhetorical sub-construction. The Evaluative sub-construction inherits the structural and argumentative features of the Rhetorical sub-construction, but it adds a restriction on the complement: it has to be an irrealis, negatively evaluated outcome of the action promoted by the speaker. The reason to consider it as a separate construction is that not only form-meaning pairs which are non-compositional on some level are considered constructions. Pairs of form and meaning that can be derived from their component parts are also stored as constructions, as long as they occur with sufficient frequency (Bybee, 2001; Goldberg, 2006). In Hebrew at least, the Evaluative sub-construction is in effect a conventional formula used to convey that some action is worth doing because its negative consequences are very limited, or pale in comparison with the potential benefits.

In sum, each of the three "uses" presented in (17)-(19) constitutes a distinct superlative maximum sub-construction. While the Scalar construction can be used to describe objective facts about the world, the other two explicitly mark the stance of the speaker towards the objective reality. This is however somewhat simplistic, as we'll see in future sections that both minimum and maximum Scalar sub-constructions have a more complex discourse function in fact.
2. The Scalar minimum and maximum sub-constructions

Since both minimum and maximum Scalar sub-constructions have similar (though opposite) functions, examining them side-by-side highlights their distinctive argumentative discourse functions. Generally, the point of the Scalar constructions is to denote either the lower or the upper bound of some scale. The two superlative expressions, as modifiers, can operate on both conventional and ad hoc scales. (21) and (22) are examples in which the complement is associated with a conventional scale, while (23) and (24) are instances of Scalar constructions with a pragmatic scale.

21. kol exad kulak be-nafjo lefaxon pa’am axat bexayav khe-ha-irim lo hispiku lakaxat oto bazman me-ha-gan, o ibdu oto ba-kanyon o be-xof yam home. "Everyone was scarred at least once in their lives when their parents didn’t make it in time to pick them up from kindergarten, or lost them in the mall or in a crowded beach."

22. carix lidxos et ha-mesarim hayelev letox shtey dakot le-xol ha-yoter, ve-latet et ha-meser ha-eftektivi be-yoter be-30 ha-ñiot ha-riñot. "You need to compress the messages into two minutes at most, and present the most effective message in the first 30 seconds."

23. ata me’id al xoser nisayon, ve-axen nisayon yaxol la’azor be-pitux xuñim politijim aval eineno hexrexi. xuñim plitiyim bri’im mexaivim le-xol ha-paxot safkanut bri’a klapay “ha-imuc ha-ze le-lo tmura”. "You are talking about lack of experience, and indeed experience can help develop political skills, but it’s not necessary. Healthy political skills require at the very least a healthy skepticism about this “adoption for no cost”."
24. harbe anaşim mefarsenim tmunot ba-feisbuk. […] lo mejane ma ha-siba le-pirsum ha-tmuna, larov anaşim mecapim lekabel bitmura rak laik o maksimum tguva oheedet.

"Many people upload photos on Facebook. The reason for sharing the photo does not matter, mostly people only expect that someone will like it, or at most leave a nice comment."

Interestingly, while Scalar constructions assert that the complement is the highest or lowest point on some scale, it cannot be absolutely maximal or minimal. Consider (25), for example: it asserts that the maximal length of Animal Farm is 130 pages, i.e. that the highest possible point on the scale of number of pages such that Animal Farm is that long is 130. But now consider (25) again, this time in a context where all books which exist in the world are 130 pages long or less. In this context, (25) would be infelicitous (and trivial), because it violates Grice's Quantity Maxim. B₁’s and B₃’s replies in (26) are infelicitous for the same reason.

25. ~ Animal Farm is at most 130 pages long.
26. ~ A: How much do you think you got on the exam?
   B₁: ??at most 100.
   B₂: at most 80.
   B₃: ??at least 0.

Interestingly, minimum 'minimally/at least' is often (11.2% of all minimum tokens of in the Scalar construction) used in the Scalar construction with a complement that typically pertains to the top of a scale, such as in (27):

27. xayav ledaveax ñe-rostbif ha-sinta hafax le-exad mi-matkonei ha-bait ñeli, hexanti oto kama paamim kmo ba-matkon, ve-od paam hayom la-piknik im ha-cipuy ñel ha-xardal ve-ha-dvaf, vekulam xoñvim ñe-ani minimum ñef"

"I have to report that the Sirloin roast beef became one of my home recipes, I made it twice according to the recipe, and one more time today for a picnic with the honey and mustard coating, and everyone thinks that I am minimum a chef."

17
Chefs are located at the top of the scale which ranks people according to their mastery of cooking. Since the Scalar minimum sub-construction asserts that the complement is the smallest possible value on this scale, the maximal value chef is coerced into a non-maximal construal, as if the writer's cooking skills are perceived by some as surpassing those of a chef. The result is a playful way of expressing that people were impressed with the writer's cooking skills. Other complements of minimum in this configuration in my sample include Oscar winner, three Michelin star restaurant and god.

Examples (25)-(27) also show that while the Scalar and minimum maximum constructions might superficially seem to present a mere objective statement of facts, they actually have a more complex discourse function. This feature seems to be shared between constructions with superlative modifiers and those that involve other types of modifiers (such as directional modifiers). However, some aspects of its discourse function are not shared with other constructions. This is addressed in the next sub-sections.

### 2.1 Construing the maximal complement as a relatively low value

The Scalar maximum sub-construction manifests some interesting idiosyncratic patterns. The most notable one is the construal of the maximal value denoted by the complement in the construction as actually relatively low or unremarkable. This was already noticed by Anscombe and Ducrot (1983), who argued that *au plus* ‘at most’ can only be used to support a conclusion where some (maximal) value is low:

28. Few/??many car drivers exceed 120 km/h, at most 20%.

(Anscombe and Ducrot, 1983)

Indeed, in 27.9% of the tokens of Scalar constructions in my sample, the complement of the Scalar construction is construed as low, and there isn’t a single instance in which the complement is construed as a high value. (24) is a case in which the complement of maksimum ('a nice comment on your Facebook photo’) is understood to be small and rather insignificant: the writer of that example writes that getting a nice comment is usually not what motivates people to upload their photos on Facebook.
A possible explanation for this fact can be the truth-conditional meaning of maximum Scalar constructions: when an interval is only upper-bounded, it is compatible with a state of affairs in which the actual value is 0 (or discoursally counts as 0). An utterance such as "at most 20% of car drivers exceed 120 km/h" is in principle compatible with 'no drivers exceed that speed'. In that case, it can hardly follow that many car drivers exceed that speed. Additionally, explicitly canceling the lower bound of a set of potential values whose maximal point is already considered low according to the shared background assumptions of the interlocutors is a strategy speakers can employ in order to form stronger arguments. Compare (29a) which lacks a lower bound, with its counterpart (29b), which is both lower and upper-bounded. Given a consensus that if 20% of car drivers are fast drivers, it still counts as a small proportion, saying that something is true of at most 20% of car drivers serves as a stronger basis for a conclusion that they are few.

29. a. Few car drivers exceed 120 km/h, at most 20%.
   ~ b. Few car drivers exceed 120 km/h, 20%.

However, trying to explain why the Scalar construction cannot construe its complement as high or remarkable proves to be more difficult. Any explanation that rests on the truth-conditional meaning of these constructions (in the spirit of the previous paragraph) will encounter a difficulty when faced with the data in (30)-(31) (The contrast in the first pair was observed by Schwarz et al., 2012).

30. a. ha-ʃimuʃ be-mai-supermarket yaxol laxsox laxem ad 5000 ŋkalim be-fana!
   “Using MySupermarket can save you up to 5,000 Shekels per year!”
   b. ~ ?ha-ʃimuʃ be-mai-supermarket yaxol laxsox laxem le-xol ha-yoter/maksimum 5000 ŋkalim be-fana!
   “Using MySupermarket can save you at most 5,000 Shekels per year!”
"Piranhas have a perfect body for assault – they are short (their length reaches up to 30 centimeters) and they are razor sharp."

Clearly, (30a) is a much better formulation for convincing people to use the MySupermarket app than (30b). This is because the maximum construction in (30b) cannot be used to convey that its complement, 5,000 Shekels, is a remarkably high amount. In fact, it does the opposite, forcing a low value construal on what is contextually felt to be a high value. This can be seen as an instance of coercion, where the evaluation of the value 5,000 Shekels, which might typically be considered quite high, especially in this context, is adapted to the construction it is embedded in. In contrast, both (31a) and (31b) are acceptable, as both modifiers allow for the value denoted by their complement to be construed as low (a short length). What these examples illustrate is that substituting le-xol ha-yoter/maksimum ‘at most’ with some of the other upper-bounding operators available in Hebrew and English, results in a change of meaning and/or acceptability. While ad 'up to' is compatible with both remarkable (30) and unremarkable (31) values, other maximum expressions are restricted to contextually low values.

This argumentative function of the Scalar maximum sub-construction illustrates the complex scalarity which often accompanies the maximum sub-constructions discussed in this study. The Scalar maximum sub-construction objectively construes some value as possibly the highest point on some scale, but at the same time it imposes a subjective construal of the value as low, unremarkable or insufficient. As we see below, this feature of a non-optimal argument is inherited by the other two maximum constructions.
2.2 Construing the minimum complement as a high value

Interestingly, Scalar minimum constructions are restricted to construing their argument in the exact opposite direction, that is, their complement cannot be construed as low. It must be somehow remarkable:

32. Many/few car drivers exceed 120 km/h, at least 20%.

(Anscombe and Ducrot, 1983)

Here too we see that the directional haxel me- 'from' can convey that its complement is low (33a) or high (34a), while the superlative lefaxot 'at least' is restricted to construing its complement as high, which renders (33b) infelicitous.

33. a. migvan gadal jel mesaneney jemej be-mexirim muzalim. haxel me-150 shkalim bilvad.
"A large variety of solar filters at cheap prices. From 150 shekels only."
b. ~?? migvan gadal jel mesaneney jemej be-mexirim muzalim. lefaxot 150 shkalim bilvad.
"A large variety of solar filters for cheap prices. At least 150 shekels only."

34. a. be-sri lanka rov yemot ha-ʃana xam meod, ka'aʃer ba-yom ma'alot ha-xom hen haxel me-30 ma'alot va-mala, ba-laila 22 ad 25.
"Most days it is very hot in Sri Lanka, where during the day the temperature starts from 30 degrees and up, and at night it's 22 to 25 degrees."
b. be-sri lanka rov yemot ha-ʃana xam meod, ka'aʃer ba-yom ma'alot ha-xom hen lefaxot 30 ma'alot va-mala, ba-laila 22 ad 25.
"Most days it is very hot in Sri Lanka, where during the day the temperature is at least 30 degrees and up, and at night it's 22 to 25 degrees."
It seems that the different Hebrew minimum modifiers differ in strength when marking the remarkability of their complement. Thus, le-xol ha-paxot 'at the very least' is stronger than lefaxot 'at least', as can be seen in the following example, in which le-xol ha-paxot is used to intensify the remarkability of the complement of lefaxot:

35. be-xol atar ve-atar, ba-olam kulo, mi-dorey dorot, nexjav xoser ha-mekoriyut lasgula ha-rišona ba-ma'ala ve-ha-yafa mi-kulan le-ij'ha-ma'ase ha-meyuman ve-hazariz, ve-lefaxot ti'îm ve-ti'î'a axuzim 'el bney ha-adam (ve-ze le-xol ha-paxot!) hexziku tamid be-de'a zot, ve-rak axuz exad, ulay, savar ve-sover axeret.
"In each and every site in the entire world, for countless generations, a lack of originality was considered as the primary and most wonderful characteristic of the skilled and swift man of action, and at least 99% of people (and this is at the very least!) always held this view, and only one percent, maybe, thought and thinks otherwise."

We see then that the Scalar minimum construction has a clear argumentative function, of construing its complement as contextually significant. This argumentative function, together with its scalar meaning of indicating that the value denoted by modifier's complement is the lower bound of a scale, is in line with the general argumentative function of the other superlative minimum constructions (the Rhetorical and the Evaluative minimum sub-constructions), of introducing a weak, yet sufficient argument for the speaker's point. In argumentative scales, the lower an item is on some scale, the weaker its argumentative force. An item which serves as the lowest point on an argumentative scale, can be readily construed as a weak argument. At the same time, the argument is construed as contextually significant, or, in other words, sufficient to support a certain conclusion. Thus, the end result is a complement whose argumentative force is minimal, yet sufficient.

Summing up sections 2.2-2.3, the Scalar sub-constructions show an idiosyncratic behavior, which is not observed for some of the other scalar maximum and minimum modifiers available in Hebrew. The maximum Scalar sub-construction is restricted to framing its complement as not remarkable, while the minimum Scalar sub-construction is restricted to framing the complement as not unremarkable. These features are strongly related to the argumentative functions of the other
minimum and maximum sub-constructions. However, while the Scalar constructions can still be used to objectively report a state of affairs, the other sub-constructions impose the speaker's subjective construal on the complement of the modifier.

2.3 The Scalar sub-constructions and discourse profiles

As we've seen, the superlative modifiers are not readily interchangeable with other scalar modifiers. But what about modifiers of the same type? That is, are lefaxot 'at least', le-xol ha-paxot 'at the very least' and minimum 'minimally/at least' fully interchangeable in the Scalar construction? Are maximum and le-xol ha-yoter 'at most' fully interchangeable in the Scalar construction?

Section 2.3 examines the discourse profiles associated with the Hebrew expressions, pointing to at least a partial differentiation between the minimum modifiers with regards to the Scalar sub-construction. Discourse profiles are “[…] non-obligatory discourse conditions obtaining when a certain linguistic expression occurs, provided these conditions repeat themselves consistently enough.” (Ariel, 2008). We can think of the discourse profile as a three-way association between a form, its meaning or function and a set of contextual cues, all of which tend to co-occur. Discourse profiles often correlate with, and hence facilitate the accessing of discourse functions, which may even be obligatory (and if so – grammatical).

One potential difference between the superlative expressions could be the type of scale (conventional versus ad hoc) associated with the expression in the Scalar construction. Table 2 shows the distribution of the two types of scales for each of the minimum modifiers:

<table>
<thead>
<tr>
<th>Expression</th>
<th>Conventional scale</th>
<th>Ad hoc scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>lefaxot 'at least'</td>
<td>95.5% (64)</td>
<td>4.5% (3)</td>
</tr>
<tr>
<td>le-xol ha-paxot 'at the very least'</td>
<td>56.7% (38)</td>
<td>43.3% (28)</td>
</tr>
<tr>
<td>minimum 'minimally/at least'</td>
<td>96.1% (75)</td>
<td>3.9% (4)</td>
</tr>
</tbody>
</table>

Table 2: Types of scales for the Scalar minimum construction.

We see that lefaxot and minimum do not differ in their association with a certain type of scale ($\chi^2(1, N = 146) = 0.027, p=0.87$). They both show an overwhelming preference for conventional scales. However, le-xol ha-paxot significantly differs from these two ($\chi^2(1, N = 133) = 26.783, p=0.00$,
when looking at lefaxot and le-xol ha-paxot, and $\chi^2(1, N = 145) = 29.184, p=0.00$ when looking at minimum and le-xol ha-paxot). A binomial test with the expected value of 0.5 for each scale type indicated that le-xol ha-paxot is evenly divided between the two types of scales, $p=0.13$ (one sided).

Table 3 shows no such difference with respect to the maximal modifiers ($\chi^2(1, N = 211) = 0.127, p=0.72$). Both have a strong bias for conventional scales:

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Conventional Scale</th>
<th>Ad Hoc Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>le-xol ha-yoter 'at most'</td>
<td>67.9% (93)</td>
<td>32.1% (44)</td>
</tr>
<tr>
<td>maksimum 'maximally/at most'</td>
<td>70.3% (52)</td>
<td>29.7% (22)</td>
</tr>
</tbody>
</table>

**Table 3:** Types of scales for the Scalar maximum construction.

While I did not identify other significant differences between the maximum modifiers in the Scalar sub-construction, future research may indeed reveal such distinctions.
3. Minimum constructions: Rhetorical and Evaluative sub-constructions

This chapter is dedicated to the two non-scalar minimum sub-constructions, the Rhetorical and the Evaluative ones. In addition to characterizing their semantic and argumentative roles in sections 3.1 and 3.2, I also present the discourse profiles of the Hebrew minimum modifiers (3.3), and the relations between all three minimum sub-constructions within the constructional network of the grammar (3.4). The next chapter will do the same for the Rhetorical and Evaluative maximum sub-constructions.

3.1 The Rhetorical minimum sub-construction

Kay considers the examples in (36)-(37) as instances of a single construction, the Rhetorical construction, even though he found it difficult to adequately describe a unifying semantic function for them.

36. Mary is at home, at least John's car is in the driveway.
37. Mary will help me, at least for a short time.

(Kay, 1992)

(36) is used to reduce the speaker's commitment to the stronger assertion, by drawing attention to the evidence it is based on. This is straightforwardly derived by Grice's Maximum of Quality: Do not say that for which you lack adequate evidence (Grice, 1975). The default state should be that a sentence is uttered iff the speaker has sufficient evidence supporting it. By explicitly mentioning the source of evidence, the speaker signals that this default assumption is not applicable.

In the case of (37), the speaker seems to be comparing two propositions (38a and b), one stronger or more informative than the other:

38. a. Mary will help me for as long as I need her to.
    b. Mary will help me for a short time.

(Kay, 1992)
Kay argues that although (38b) is intuitively weaker than (38a), it is difficult to say what this relative strength is based on. For example, one cannot say that (38a) is stronger than (38b) because the former entails the latter, as they are contradictory. However, I argue in this chapter that when looking at sentences like (37) within a wider context, we see that the relative strengths of these propositions are based on the argumentative force of the sentences in (38).

For Lewis (2000), (36) and (37) constitute two different types of the Rhetorical sub-construction, the Restrictive and the Evidential. She then adds another sub-type, the Concessive:\footnote{Lewis (2000) terms the three types Alternative, Restrictive and Epistemic-Retreat. I prefer the terms Concessive (instead of Alternative) and Evidential (instead of Epistemic-Retreat), as I believe they represent the sub-constructions more accurately.}

\begin{enumerate}
\item If you make an appointment you should jolly well go and see it.. or \textbf{at least} pick the phone up and say \textit{erm you know}.
\end{enumerate}

(Lewis, 2000)

Section 3.1.1 presents a more detailed description of Lewis' analysis. I follow her categorization, although as I show in sections 3.1.1.1-3.1.1.3, each of these sub-types comes with a set of distinct semantic and structural features. I therefore suggest that they are best viewed as three sub-constructions. Moreover, in section 3.4 I argue that they are not on a par: while the Restrictive and Concessive sub-construction are indeed instances of the Rhetorical sub-construction, the Evidential is in fact an instance of the Restrictive.

As for the unifying semantic function of the three Rhetorical minimum constructions, I propose that it is not restricted to a sentence-internal comparison of two assertions with different strengths. Instead, the discourse function of such constructions is to present a weak, yet sufficient argument in favor of the speaker's point. In doing so, the speaker retracts a previously made strong, in fact overstated argument, but preserves the validity of their point. Thus analyzed, these sub-constructions constitute another type of construction used for retracting an overstatement, such as Concessive Repair, as discussed by Couper-Kuhlen and Thompson, 2005. This point is further elaborated on in section 3.1.2.
3.1.1 Three types of Rhetorical *at least*

As I mentioned in the previous section, Lewis (2000) distinguishes three sub-types of Rhetorical *at least*: Concessive (40), Restrictive (41) and Evidential (42):

40. If you make an appointment you should jolly well go and see it.. or *at least* pick the phone up and say erm you know.

41. ...these [operas]... are largely unrevivable, *at least* in the present climate of musical taste.

42. Raymond Seitz was the most popular and successful US ambassador to the Court of St James's since David Bruce more than 30 years ago. Or *at least* that represented the view on this side of the Atlantic.

(Lewis, 2000)

Lewis' analysis of these three sub-types adopts the perspective of Mann and Thompson's Rhetorical Structure Theory (Mann and Thompson, 1988). Since this framework lies beyond the theoretical scope of the present study, I introduce Lewis' analysis of the three Rhetorical sub-types, avoiding theory-specific details.

Using the Concessive Rhetorical *at least*, the speaker introduces two distinct alternatives, one of which is stronger than the other. The weaker one is the complement of *at least*. Additionally, there is a sense of concession in the meaning of the construction, as the speaker concedes that the stronger statement may not be the case, but the weaker one certainly holds. Structurally, it consists of two phrasal components of the same type, one of which is the *at least* complement.

In the second, Restrictive type, the *at least* proposition restricts the application of the initial assertion. The unit comprised of *at least* and its complement is usually an adjunct or a parenthetical, and it typically occurs following the clause it modifies.

Finally, Evidential *at least* introduces the evidence for a previous idea. It shares with the other two sub-types of Rhetorical *at least* the comparison of a weak idea and a strong one. But in Evidential *at least*, two versions of the same claim are compared: once with a default, strong commitment and once with a lowered degree of speaker commitment.
In the following sections I discuss each of the Rhetorical sub-constructions and, based on the Hebrew data, providing a more detailed analysis of their argumentative function. My claim is that while they retract a stronger argument in favor of the speaker's point, all three introduce a minimally sufficient argument in favor of the speaker's point.

3.1.1.1 The Concessive Rhetorical sub-construction

The Concessive Rhetorical sub-construction is comprised of two parts, connected by the minimum expression. Consider example (43), a typical instance of this sub-construction:

43. kol mi je-elergi bevaday mekir heytev et kardit ha-avak, o lefaxot jama alea.
   ‘Anyone who has allergies probably knows dust mites very well, or at least heard of them.’

(43) is taken from a text that markets iRobot, a robotic vacuum cleaner. The writer’s goal is to lead the readers to the conclusion that they should buy an iRobot, because it gets rid of dust mites. The writer first introduces a strong argument for their case: Everyone who has allergies is very familiar with dust mites (and by implicature, recognizes them as a major problem). They then follow with an alternative argument (the complement of lefaxot), that anyone who has allergies has heard of dust mites (and by implicature, recognizes them as a major problem). The latter argument is construed as a weaker argument. Crucially, however, the argument is construed as sufficient support for the speaker’s main (marketing) point.

This sub-construction then does more than juxtapose two alternatives, one stronger and one weaker, which is Lewis’ point. By using the Concessive Rhetorical sub-construction, the speaker concedes that her stronger argument might not hold\(^{10}\), but that in fact it is not even necessary. This is so because the speaker frames her fallback weaker argument as sufficient in supporting her discourse point.

---

\(^{10}\) This is why the sub-construction is accompanied by epistemic retreat. I follow Lyons in regarding utterances which convey the level of the speaker’s commitment to the truth of a proposition as epistemically modal (Lyons, 1977).
The Concessive Rhetorical sub-construction is strongly associated with *or*. Out of a total of 61 instances of Concessive Rhetorical sub-constructions in the corpus, 56 (91%) were disjunctions. Interestingly, this construction seems to combine the semantics of minimum modifiers with that of *or* constructions. The minimum modifier contributes the minimal point on a scale, in this case taken as argumentatively significant.

As for *or*, I follow Ariel and Mauri, 2018, in press, in regarding *or* as a marker of alternativity between the disjuncts (rather than a logical inclusive/exclusive disjunction). *Or* constructions give rise to many different recurring readings, which actually constitute different explicatures – a level of representation which is the result of enriching the bare linguistic meaning of an utterance with pragmatic inferences, up to a complete truth-bearing proposition (Sperber and Wilson, 1986). Concessive Rhetorical constructions can be considered as a Repair *or* construction. In these constructions, the speaker first puts forward a complete, planned utterance, and then retroactively adds the second disjunct in a way that somehow undercuts the first (Ariel, in preparation). In the Concessive Rhetorical sub-construction, the introduction of the weak argument undercuts the first alternative by reducing the speaker's commitment to the stronger one.

In sum, using the Concessive Rhetorical sub-construction, the speaker first introduces a strong argument in favor of their point. They then concede that it may not hold, while at the same time expressing that it is irrelevant whether it holds or not. This is because there is another weaker, yet sufficient argument for the same conclusion. In addition, this sub-construction is strongly associated with *or*, and inherits from it the profiling of the two arguments as alternatives.

### 3.1.1.2 The Restrictive Rhetorical sub-construction

Restrictive Retreat constructions combine the minimum modifier with an adverb, to create a complex adverb, which restricts the application of the predication in the main clause. (44) is a typical example. First, the writer asserts that Etty Hillesum is a character that will never die. This assertion is legitimately interpretable as “Etty Hillesum is a character that will never die in **any sense**”. *Lefaxot* combines with *in my heart* to restrict the application of the predication in the first assertion.
Once again, the Rhetorical sub-construction compares two alternatives. The first (45a) is a strong argument in favor of the speaker's point (that the readers should read Hillesum's works), and the second (45b) is a weaker argument for the same point. The speaker retracts her strong commitment to (45a), while at the same time construing the weaker (45b) as minimally sufficient to support her point. Once again, the truth of the strong argument is in effect rendered discoursaly irrelevant.

45. a. Etty Hillesum is a character that will never die in any sense.
   b. Etty Hillesum is a character that will never die in my heart (even if not in other senses).

Summing up, the Restrictive sub-construction achieves the same result as the Concessive sub-construction, but it does it differently. It restricts the application of the main predicate in the first alternative, while nonetheless construing the restricted proposition as argumentatively sufficient to support the speaker’s case.

3.1.1.3 The Evidential Rhetorical sub-construction

Just like the two other Rhetorical sub-constructions, the Evidential Rhetorical sub-construction compares two alternatives, such that one is a strong argument for the speaker's point, and the other is a weak, yet sufficient argument for the same conclusion. This sub-construction does it by introducing the evidence upon which the strong argument is made, and it is this interactional step that weakens the argument. I exemplify with (46):

46. ka-yom, im ha-globalizaciya, ve-ha-xasifa ŋel etyopya la-maarav, ezraxey etyopya ne’esu mudaim gam le-acmam ve-la-netiyot ha-pratiyot ŋelahem ve-laxen nitan limco homoom, lemaʃal be ir ha-bira adis ababa, kax lefaxot karati be-exad ha-itonim.
‘Today, with the globalization and exposure of Ethiopia to the West, the citizens of Ethiopian have become aware of themselves and of their personal inclinations and therefore you can find gay men in the capital city of Addis Ababa, at least this is what I read in a newspaper.’

The writer of (46) argues that sexual orientation is a product of cultural transmission, rather than a biological fact (the speaker's point, not here cited). The first argument, that gay men appeared in Addis Ababa only after Ethiopia was exposed to the west (where homosexuality is relatively accepted), is a strong argument in favor of that point. The complement of lefaxot specifies the evidence that is available for him in making the argument. Thus, the two alternatives compared by the Evidential sub-construction are (a) the strong argument (47a), and (b) the same argument modified by an evidential adverb which weakens the speaker's commitment to it (47b). The weaker argument, (47b) is construed as sufficient to support the speaker's point.

47. a. Following the globalization and exposure of Ethiopia to the West, you can find gay men in the capital city of Addis Ababa.

b. According to what I have read in the newspaper, following the globalization and exposure of Ethiopia to the West, you can find gay men in the capital city of Addis Ababa.

Thus, using a Rhetorical minimum construction the speaker introduces a minimally sufficient argument in favor of her point, despite the fact that she retracts her initially strong argument. In the case of the Evidential sub-construction, this retraction results from making explicit the evidential basis for the argument.

3.1.1.4 Summing up the Rhetorical sub-constructions

Table 4 summarizes the Rhetorical sub-constructions, as describe in the previous sections:
<table>
<thead>
<tr>
<th>Scope of the modifier</th>
<th>Complement of the modifier introduces</th>
<th>Argumentative orientation and force of the argument introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concessive</td>
<td>Phrasal/Sentential</td>
<td>An alternative argument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A weak, yet sufficient argument in favor of the speaker's point</td>
</tr>
<tr>
<td>Restrictive</td>
<td>Phrasal</td>
<td>An adverb restricting the argument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A weak, yet sufficient argument in favor of the speaker's point</td>
</tr>
<tr>
<td>Evidential</td>
<td>Phrasal</td>
<td>The evidence for the strong argument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A weak, yet sufficient argument in favor of the speaker's point</td>
</tr>
</tbody>
</table>

Table 4: Rhetorical minimum sub-constructions.

I argued that by using these sub-constructions, the speaker first introduces a strong argument in favor of their point. They then reduce their commitment to it, and instead introduce a relatively weak, yet sufficient argument for the same point. In doing so, the speaker's point remains valid, despite the non-optimal argument made by the speaker to establish it.

3.1.2 Rhetorical minimum construction as a way to retract overstatements

In an effort to convince their addressees to accept their point, speakers might resort to making claims that they are not justified in making. The lack of justification is sometimes apparent to the addresses, or can potentially be apparent. How can speakers retract the overstatement they made, while at the same time save face and continue to argue for their case? Couper-Kuhlen and Thompson (2005) described one such way, the Concessive Repair. Using a Concessive Repair, speakers construe a potential counter-argument as merely an exception to their overstatement. Unlike in logic, in everyday argumentation, exceptions do not necessarily refute one's argument, they just weaken it somewhat. Thus, the validity of the speaker's main point is maintained. I suggest the Rhetorical sub-constructions function to achieve the same goal, but by slightly different means.

In this section, I first introduce Couper-Kuhlen and Thompson's analysis of the Concessive Repair. I then draw parallels between Concessive Repair and the Rhetorical sub-constructions, and
show how the latter are used to retract overstatements. Additionally, I discuss some of the differences between the two types of constructions.

### 3.1.2.1 Concessive Repair (Couper-Kuhlen and Thompson, 2005)

An instance of Concessive Repair is found in (48) (adapted from Couper-Kuhlen and Thompson, 2005, example 4):

48. I'm just so glad it's an in-service training day tomorrow so I can switch off. Well, not really switch off but, you know, relax.

The Concessive Repair is comprised of three parts: an overstatement, a concession, and a revised statement. Table 5 is a schematic representation of the Concessive Repair in (48):

<table>
<thead>
<tr>
<th>Overstatement</th>
<th>I can switch off.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concession</td>
<td>Well, not really switch off</td>
</tr>
<tr>
<td>Revised statement</td>
<td>but, you know, relax.</td>
</tr>
</tbody>
</table>

**Table 5**: A schematic representation of (48).

Couper-Kuhlen and Thompson define *overstatements* as statements that include objective exaggerations (categorial claims about the world, which often involve 'extreme' expressions such as all, every, always, etc. (Pomerantz, 1986)), as well as cases where the speaker makes a statement which he lacks the qualification to be making (or is perceived by the addressee as unqualified to make). The overstatement can be formulated in the affirmative or in the negative.

The concession has the opposite polarity of the overstatement, and the revised statement has the same polarity as the overstatement. Since the overstatement in (48) is formulated in the affirmative, the concession, *not really switch off*, is in the negative. In the concession, the speaker essentially admits that the overstatement is false, although they often do so by framing the concession as an exception. Finally, the speaker provides a revised statement, which is not as strong as the overstatement, but is enough to make the speaker's main point hold.

Concessive Repair relies on scales, both conventional and ad hoc ones. For example, when the overstatement is affirmative, the concession is actually a negation of a statement $P_c$, and the
revised statement is \( P_r \), such that \( P_c \) is ranked higher on a scale than \( P_r \). Table 6 shows the schematic representation of (48), including the scalar relations:

<table>
<thead>
<tr>
<th>Overstatement</th>
<th>Concession</th>
<th>Revised statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utterance</td>
<td>I can switch off.</td>
<td>(Well,) not switch off</td>
</tr>
<tr>
<td>Schema</td>
<td>NEG</td>
<td>( P_c )</td>
</tr>
<tr>
<td>Scalar relations</td>
<td>( P_c ) &gt; ( P_r )</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: A schematic representation of (48), including scalar relations.

the Concessive Repair is a way for speakers to retract an initial overstatement, while saving face. I note that this practice too involves non-optimal argumentation, as the speaker admits that their strong argument does not hold, while a weaker, yet sufficient one does. On this view, the Concessive Repair shares the argumentative function of the Rhetorical sub-constructions discussed above. In what follows, I elaborate more on the connection between the two constructions.

3.1.2.2 The Rhetorical minimum sub-constructions and Concessive Repair

Looking at the first, strong arguments introduced by the speakers/writers of the instances of the Rhetorical minimum sub-construction we've seen so far, it is apparent that they count as overstatements according to Couper-Kuhlen and Thompson's definition. In (43) and (44), repeated here as (49) and (50), the first argument is a strong formulation which includes the extreme expressions *anyone* and *never*. In (46), repeated here as (51), the writer, who reports about a country with which Israelis are usually less familiar, risks being considered by his addressees as unqualified to make such a claim about it.

49. kol mi je-alergi bevaday mekid heytet et kardit ha-avak, o lefaxot jam alea.
   ‘Anyone who has allergies probably knows dust mites very well, or at least heard of them.’
50. eti hilesum hi dmut je-leolam lo tamut... lefaxot lo be-libi.

Etty Hillesum is a character that will never die... at least not in my heart’

51. ka-yom, im ha-globalizaciya, ve-ha-xasifa jel etyopya la-maarav, ezraxey etyopya ne’esu mudaim gam le-acmam ve-la-netiyot ha-pratiyot jelahem ve-laxen nitan limco homoim, lemaʃal be ir ha-bira adis ababa, kax lefaxot karati be-exad ha-iltonim.

Today, with the globalization and exposure of Ethiopia to the West, the citizens of Ethiopian have become aware of themselves and of their private inclinations and therefore you can find gay men in the capital city of Addis Ababa, at least that is what I read in a newspaper.’

Couper-Kuhlen and Thompson acknowledge that using or at least is also a way for speakers to back down from an overstatement, although the construction does not specify the grounds for backing down. However, they argue that by using or at least, the speaker “simply offers two successive weaker formulations of her original statement without contrastively denying stronger ones”, and that only Concessive Repair allows the speaker to back down from the overstatement in the form of construing the concession as an exception to the overstatement, thus providing the addressee the reason for backing down, which ultimately makes the speaker appear as "being accountable"\(^\text{11}\). While I agree with Couper-Kuhlen and Thompson that or at least, and Rhetorical at least construction in general, do not specify the reason for backing down from the overstatement, I disagree with them on the other points.

\(^{11}\) Couper-Kuhlen and Thompson also note that the comparison present in the at least construction is not restricted to a single domain:

1. People don’t go to Germany, or at least English people generally don’t go to Germany on holiday.

They argue that there are two scales evoked here: <people, English people>, and <go to Germany on holiday, go to Germany on holiday generally>. While this can point to the generalization that Concessive Repair is restricted to operating on a two-dimensional scalar model, while Rhetorical at least is not, this difference is not substantial on the level of discourse. It simply restricts the Concessive Repair construction to less complex comparisons.
My first disagreement is with the idea that Rhetorical minimum sub-constructions simply juxtapose two alternatives, or offer weaker formulations. As I argued in sections 3.1.1.1-3.1.1.3, these constructions do more than that: they offer a way for speakers to replace a strong argument for their case with a weaker one, while construing it as sufficient for their point. Additionally, the construction is accompanied by a weakened commitment to the stronger alternative, while at the same framing its (false) truth value as irrelevant.

Moreover, I suggest that these sub-constructions also allow speakers to appear as if they weighted their options carefully, and are therefore more reliable. They just do it in a different way from the Concessive Repair. Each sub-construction achieves this in a different way. The Concessive and Restrictive sub-constructions convey that it does not matter whether the overstatement is true or not, since there is a weaker statement which holds and it's sufficient to support the speaker's point by itself. The Evidential sub-construction achieves this in a more complex way, since in this case, if the overstatement does not hold, there is no alternative argument to support the speaker's point. By presenting the evidence on the basis of which the overstatement was made, the speaker retracts the overstatement by replacing it with a weaker formulation - the overstatement modified by an evidential adverbial. On one hand, it reduces the speaker's commitment to the truth of the overstatement, but on the other hand it provides what is construed to be a valid evidential basis for the utterance. This complex move results, as in the other sub-constructions, in the retraction of the overstatement while maintaining the validity of the speaker's main point. This is achieved by construing an alternative argument as minimally sufficient. By doing this, the speaker eliminates any potential move of challenging the truth of the overstatement by the addressee.

Summing up, despite apparent differences between the two types of constructions, they serve the speakers in a similar way, as both are used to retract, or reduce commitment, to an overstatement, while offering a weaker statement at the same time. The weaker statement is construed as a minimally sufficient argument in favor of the speaker's point, which remains valid despite the fact that the speaker concedes that her strong argument might not hold. Concessive Repair constructions thus exemplify another non-optimal argumentative strategy speakers employ.

12 Couper-Kuhlen and Thompson do not explicitly talk about discourse points and arguments. They only write that by using Concessive Repair, "[…] the essence of an original affirmative or negative claim can be preserved."
3.2 The Evaluative minimum sub-construction

(52) is a typical instance of the kind of Evaluative *at least* constructions discussed by Kay:

52. axrey je nifcati ba-pigua amarati le-ima jeli: lefaxot yej li sipur tov le-de voys.
"After I was injured in the terrorist attack, I told my mother: at least I have a good story for The Voice"

Indeed, as Kay argues, this sub-construction introduces an event which is better than some contextually relevant bad or neutral event, but not as good as some other imaginable event. In the case of (52), the better event introduced by the construction is 'having a good story for the reality TV show the voice', and the worse event is 'being injured in a terrorist attack'. The imaginable event, which is construed as better than the current state of affairs is, presumably, 'not being injured in a terrorist attack'.

However, I argue that this sub-construction actually encompasses two sub-types. The first, represented by (52), is the one Kay described. I name it Positive Evaluation. In section 3.2.1, I present a more precise characterization of the semantics of the Positive Evaluation sub-construction. Additionally, I identified a second sub-type, which I call the Optative Evaluative sub-construction. I present this sub-construction in section 3.2.2 and distinguish it from the Positive Evaluation sub-construction. Section 3.2.3 discusses the argumentative aspects of the sub-constructions.

3.2.1 Positive Evaluation

In this sub-section, I offer a slightly more precise characterization of the meaning of the Positive Evaluation sub-construction than that of Kay. I suggest that in order to construct the meaning of the Evaluative minimum sub-construction, two events must be involved. The first (event A) is a non-positive realized event. This event can be either explicitly mentioned (e.g. *I was injured in the terrorist attack*), or, if it's salient enough, inferred from the context. The second (event B) is a
positively evaluated realized event\textsuperscript{13}. This is the event denoted by the complement of the minimum modifier ('I have a good story for The Voice', in (52)).

\begin{tabular}{|l|l|}
\hline
{Event A} & {Event B} \\
\hline
a not-positively evaluated realized event & a positively evaluated realized event \\
Being injured in a terrorist attack. & Having a good story for the reality TV show, ‘The Voice’. \\
\hline
\end{tabular}

\textbf{Table 7:} The events comprising the meaning the Positive Evaluation sub-construction in (52).

What the Evaluative sub-constructions do is to construe three events in the following way:

\begin{tabular}{|c|c|c|}
\hline
Composition & A and not B & A and B & Not A \\
\hline
Construal & The worst event & A less than maximally positive event & A better event \\
\hline
\end{tabular}

\textbf{Table 8:} The schematic representation of the Evaluative sub-construction.

\textsuperscript{13}I only found a single case in which event B is not realized, and even then, this event is construed as inevitable if the hypothetical circumstances would be realized:

2. [...] im 4000 haya ha-maksimum \textit{je}-rov ha-soxarim hayu muxanim \textit{je}salem lifney \textit{je}-ya\textquoteleft adifu lakaxat maj\textit{kanta} harey \textit{je}-hamaskir lo yacliax limco mij\textit{je}hu \textit{je}-ye\textit{salem} lo 5000 le-orex zman ki adif kvar liknot dira doma – lefaxot basof ti\textit{hiye} \textit{je}li […].
"If 4,000 Shekels was the maximal amount that most people were willing to pay instead of taking a mortgage, then the home owner won't be able to find someone who will pay them 5,000 Shekels for a long time, because you might as well buy a similar apartment – \textbf{at least} it will be mine eventually."

Here, the event of owning an apartment is not realized, but it will be if a person will buy an apartment and pay the mortgage off.
Applying this schema to (52), its meaning can be represented as follows:

<table>
<thead>
<tr>
<th>Composition</th>
<th>A and not B</th>
<th>A and B</th>
<th>Not A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construal</td>
<td>The worst event</td>
<td>A less than maximally positive event</td>
<td>A better event</td>
</tr>
<tr>
<td>Application to (51)</td>
<td>Being injured in a terrorist attack and not having a good story for the reality TV show, ‘The Voice’.</td>
<td>Being injured in a terrorist attack and having a good story for the reality TV show, ‘The Voice’.</td>
<td>Not Being injured in a terrorist attack.</td>
</tr>
</tbody>
</table>

Table 9: a schematic representation of (52).

Note that the speaker's overall stance towards the current, non-optimal state of affairs is minimally positive. Thus, even though the A and B event is less than maximally positive, it is also minimally sufficient to count as positive. The speaker in (52) takes advantage of this, and uses the construction in a playful manner, as if having a good story for a reality TV show is a good enough pay off for being injured in a terrorist attack.

Summing up, the Evaluative sub-construction expresses complex relations between three different events. By using this sub-construction, the speaker construes the current state of affairs (or a state of affairs that will inevitably be realized given a certain circumstance) as less than optimal, although sufficiently positive, thanks to the event introduced by the complement of the minimum modifier. As I show in section 3.2.3, this fits with the general argumentative function of minimum constructions.

### 3.2.2 The Optative sub-construction

The second sub-type of the Evaluative sub-construction is presented in (53):

53. aval madua heklitu me-xadaʃ dialogim ŋlemim? ha-teruc ha-riʃmi ve-ha-mamaf lo mesapek: kedey lehagbir et txuʃat ha-hemʃexiut ben ha-prakim. ze mekomem ve-
margiz. le-xol ha-paxot, efjar haya lixlol gam et ha-girsaoet ha-mekoriyot jel ha-prakim al gabei ha-diskim.

"But why did they re-record entire dialogs? The official and really unconvincing excuse: in order to increase the sense of continuity between the episodes. It’s outrageous and annoying. At the very least they could have included the original versions of the episodes in the CD."

Much like the Positive Evaluation sub-construction, the meaning of the Optative sub-construction can be constructed from considering two events. The main difference between the two sub-constructions, is that (a) event A in the Positive Evaluation construction is a not-positively evaluated realized event, while in the Optative sub-construction this event is a negatively evaluated realized event, and (b) event B in the Positive Evaluation construction is a positively evaluated, typically realized event, while in the Optative sub-construction this event is unrealized. The differences between them are summarized in table 10:

<table>
<thead>
<tr>
<th></th>
<th>Parameters</th>
<th>The Positive Evaluation sub-construction</th>
<th>The Optative sub-construction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Event A</strong></td>
<td>Evaluation</td>
<td>Not-positive</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Realization</td>
<td>Realized</td>
<td>Realized</td>
</tr>
<tr>
<td><strong>Event B</strong></td>
<td>Evaluation</td>
<td>Positive</td>
<td>Non-negative</td>
</tr>
<tr>
<td></td>
<td>Realization</td>
<td>Realized</td>
<td>Unrealized</td>
</tr>
</tbody>
</table>

Table 10: A comparison of the events comprising the meaning of the Positive Evaluation and Optative sub-construction.

Table 11 contains a schematic analysis of the events relevant to (53). Unlike the Positive Evaluation sub-construction, the speaker here also expresses their wish that event B will be realized, in this case – that the producer of the CDs will include the original versions of the series. Hence the name Optative.

<table>
<thead>
<tr>
<th>Event A</th>
<th>Event B</th>
</tr>
</thead>
<tbody>
<tr>
<td>a negatively evaluated realized event</td>
<td>a positively evaluated unrealized event</td>
</tr>
<tr>
<td>Re-recording entire episodes</td>
<td>Including the original episodes</td>
</tr>
</tbody>
</table>

Table 11: The events comprising the meaning the Optative sub-construction in (53).
And, in the same way, the overall meaning can be represented by the following schema:

<table>
<thead>
<tr>
<th>Composition</th>
<th>A and not B</th>
<th>A and B</th>
<th>Not A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construal</td>
<td>The worst event</td>
<td>A less than maximally positive event</td>
<td>A better event</td>
</tr>
<tr>
<td>Application to (52)</td>
<td>Re-recording entire episodes and not including the original episodes.</td>
<td>Re-recording entire episodes and including the original episodes.</td>
<td>Not re-recording entire episodes.</td>
</tr>
</tbody>
</table>

**Table 12**: a schematic representation of (53).

In sum, using the Optative construction, the speaker expresses that the current state of affairs is the worst possible event. Additionally, they express their wish that some unrealized, positive event will happen, even though the one they wish for is absolutely not the best option.

### 3.2.3 The Evaluative minimum sub-construction and argumentation

As mentioned before, Anscombe and Ducrot also discussed the Evaluative meaning of French *au moins* 'at least', terming it *au moins modale* 'modal at least'. According to their account, *au moins modale* indicates a change in argumentative direction. Indeed, I found that *aval* 'but', or *ax* 'but', the classical change-of argument connective, often preface the minimum modifier (33.3% of all instances).

I wish to add to Anscombe and Ducrot's insight, and argue that both sub-types share another argumentative function, namely, framing some event as minimally sufficient for evaluating the entire state of affairs as not negative. This function is in line with the general argumentative function of minimum construction, which introduces a minimal, yet sufficient argument. The motivation behind analyzing this function as argumentative is that here too, an objective state of affairs is construed as sufficient to justify the speaker's stance towards the state of affairs.

Summing up the previous sections, both Evaluative sub-constructions indicate that some event is minimally sufficient for the evaluation of an undesirable state of affairs as not entirely
negative. Each sub-type does it differently: The Positive Evaluation sub-construction is used to justify the speaker's evaluation of a current state of affairs as not entirely negative, in spite of the presence of negative circumstances. The Optative sub-construction is used to introduce the minimally sufficient unrealized condition that the speaker wishes to occur in order to make a current negative state of affairs not so negative. In both cases, the state of affairs in which the minimally sufficient event is realized is construed as non-optimal, which is in line with the overall argumentative profile of the constructions discussed in this work.

### 3.3 Discourse profiles of minimum modifiers

Table 13 presents the overall distribution of the minimum sub-construction for each Hebrew minimum modifier. Two points are immediately apparent. The first, is that minimum is almost entirely dedicated to the Scalar construction – only 2.2% of instance of minimum are in the Rhetorical sub-construction, and there were no instances of Evaluative minimum. In fact, minimum cannot be used in the Evaluative sub-construction at all, as is evident in the examples in (54):

54. a. axrei jes nifcati ba-pigua amarati le-ima jeli: lefaxot yej li sipur tov le-de voys. "After I was injured in the terrorist attack, I told my mother: at least I have a good story for The Voice"
b. ~ ?? axrei jes nifcati ba-pigua amarati le-ima jeli: minimum yej li sipur tov le-de voys.
"After I was injured in the terrorist attack, I told my mother: at least I have a good story for The Voice"

The second observation is that lefaxot and le-xol ha-paxot share the same distribution with regards to their association with the three sub-constructions (no significant difference was found between them $\chi^2(1, N = 296) = 0.988$, $p=0.61$).
However, while the absence of differences between *lefaxot* and *le-xol ha-paxot* may imply that they are fully interchangeable, this is not the case. Looking at the distribution of the three sub-types of the Rhetorical sub-construction in Table 14, we see that the Hebrew modifiers differ in their level of association with specific sub-types. *Lefaxot* is more strongly associated with the Restrictive sub-construction than with the Concessive or the Evidential sub-constructions. Additionally, it is more strongly associate with the Restrictive sub-construction than *le-xol ha-paxot* is associated with it ($\chi^2(1, N = 121) = 28.506, p=0.00$).

<table>
<thead>
<tr>
<th></th>
<th>Scalar</th>
<th>Rhetorical</th>
<th>Evaluative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>lefaxot</em> 'at least'</td>
<td>40.8% (67)</td>
<td>41.5% (68)</td>
<td>13.4% (22)</td>
</tr>
<tr>
<td><em>le-xol ha-paxot</em> 'at the very least'</td>
<td>47.2% (67)</td>
<td>37.3% (53)</td>
<td>13.4% (19)</td>
</tr>
<tr>
<td><em>minimum</em> 'minimally/at least'</td>
<td>97.8% (89)</td>
<td>2.2% (2)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Table 13**: Distribution of different minimum sub-constructions according to Hebrew modifiers.

A similar picture is revealed when we look at the Evaluative minimum sub-construction (Table 15). Once more, each Hebrew modifier is associate with a different sub-type: *lefaxot* with the Positive Evaluation sub-construction, and *le-xol ha-paxot* with the Optative ($\chi^2(1, N = 40) = 14.207, p=0.00$).

<table>
<thead>
<tr>
<th></th>
<th>Concessive</th>
<th>Restrictive</th>
<th>Evidential</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>lefaxot</em> 'at least'</td>
<td>22.1% (15)</td>
<td>67.6% (46)</td>
<td>10.3% (7)</td>
</tr>
<tr>
<td><em>le-xol ha-paxot</em> 'at the very least'</td>
<td>81.1% (43)</td>
<td>18.9% (10)</td>
<td>0% (0)</td>
</tr>
<tr>
<td><em>minimum</em> 'minimally/at least'</td>
<td>100% (2)</td>
<td>0% (0)</td>
<td>0% (0)</td>
</tr>
</tbody>
</table>

**Table 14**: Distribution of different Rhetorical sub-constructions according to Hebrew modifiers.

<table>
<thead>
<tr>
<th></th>
<th>Positive Evaluation</th>
<th>Optative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>lefaxot</em> 'at least'</td>
<td>81.8% (18)</td>
<td>18.2% (4)</td>
</tr>
<tr>
<td><em>le-xol ha-paxot</em> 'at the very least'</td>
<td>22.2% (4)</td>
<td>77.8% (14)</td>
</tr>
</tbody>
</table>

**Table 15**: Distribution of different Evaluative sub-constructions according to Hebrew modifiers.
In addition to providing insights to the specific preferences of each Hebrew modifier, these
discourse profiles also support the analysis of the sub-types of the Rhetorical and Evaluative sub-
constructions as (sub-)constructions themselves. These idiosyncratic preferences of some sub-
types to co-occur with some modifier rather than another cannot be derived from the lexical
meaning of the modifiers, since they are interchangeable.

In sum, while lefaxot and le-xol ha-paxot appear to have the same preferences when it
comes to the sub-construction, a closer examination reveals that they actually differ in their
association with sub-types of the minimum constructions. These distributional patterns support the
theoretical analysis of the sub-types as sub-constructions. Additionally, the finding that minimum
is almost entirely restricted to the Scalar sub-construction might point to the fact that this modifier
is in early stages of grammaticization, and may expand to the other constructions in the future.

3.4 The relations between the minimum sub-constructions

Recall that constructions are related to each other in a network with a hierarchical structure, where
more specific constructions inherit their features from more abstract ones. The aim of this section
is to discuss the relations between the minimum constructions analyzed in this thesis with regard
to their position within the constructional network.

Figures 2 and 3 show the constructional network of the superlative minimum constructions.
The text in bold names the constructions, and the italicized description corresponds to the meaning
of the constructions. Capital letters stand for the syntactic components of the constructions – a
minimum modifier (MinM), a superlative minimum modifier (SMinM), a comparative minimum
modifier (CMinM) or a directional minimum modifier (DMinM), and a phrasal (XP) or clausal (C)
complement. Figure 2 shows the hierarchical structure to which the superlative minimum
construction (in orange) belongs. We see the scalar bounding construction on top, which is rather
abstract, and merely indicates that a modifier takes a complement, and asserts that the complement
is the lower or upper bound of a scale. The modifier slot can be filled by a maximum modifier,
which results in the upper-bounding construction (on the left). More relevant for this section, when
the modifier slot is filled by a minimum modifier, the result is a construction from the family of
the lower-bounding construction (on the right). Then, when the modifier slot of the lower-
bounding construction is filled by a superlative modifier (as the expressions discussed here), the
result is a construction from the family of the superlative minimum construction (lower right). The meaning of this construction is rather abstract and merely indicates that the minimum modifier takes a complement, and asserts that the complement is the lower bound of a scale, and is not unremarkable. Other possible families of lower-bounding constructions which manifest different argumentative (and other) functions are those involving directional modifiers (e.g. from, lower left), comparative modifiers (e.g. more than, lower middle), and others. Since their particular functions are not analyzed in this study, they are left unspecified in Figure 2.

**Figure 2**: Part of the constructional network of scalar bounding constructions

Moving on to Figure 3, starting on the left, The Scalar sub-construction is connected to the superlative minimum construction via an instance link. An instance link exists between two constructions iff one of them is a more fully specified instance of the other (Goldberg, 1995). We
see that the Scalar sub-construction is a special case of the abstract minimum construction, as it merely specifies that the complement is phrasal\textsuperscript{14}.

Moving to the center, on the second tier, the Rhetorical construction is also an instance of the abstract minimum construction. While the complement slot is also not restricted, the scale the complement is related to is an argumentative one. Note that the Rhetorical sub-construction also requires a clause that introduces the strong argument. It does not specify whether the minimum modifier and its complement are positioned before, after or in the middle of it. Its general function is to introduce a strong argument in favor of the speaker's point, and then weaken the commitment to it by introducing a weak, yet sufficient argument for the same point.

The third and fourth tiers present the three Rhetorical sub-constructions. The Concessive and Restrictive sub-constructions are both instances of the Rhetorical sub-construction. The Concessive is not restricted to a specific type of complement, but the Restrictive only allows phrasal complements. Additionally, the Concessive sub-type only compares alternative arguments that are related to each other in ways other than restricting the application of the main predication in the sentence denoting the stronger argument. The Evidential construction is an instance of the Concessive sub-construction, as it is structurally the same, yet restricted to complements that specify the evidential source for the strong argument.

Finally, the constructions the right are the Evaluative sub-constructions. I suggest that each of the two in the bottom right is a separate instance of the Evaluative sub-construction, as each is restricted to introducing a different array of events which do not hold a subset-superset relation, as described in section 3.2.

Note that the basic (scalar) meaning of the *superlative minimum construction* is inherited by all of its sub-constructions. In the case of the Scalar sub-construction, this meaning is inherited as is. In the Rhetorical sub-construction, however, the type of scale is restricted to argumentative scales, and the remarkability of the complement manifests itself in the form of argumentative sufficiency. For the Evaluative sub-construction, the scale can also be seen as argumentative, where argumentative sufficiency always manifests itself as sufficiency for evaluating a state of affairs as positive.

\textsuperscript{14} Note that the linear order between the modifier and complement is not specified, and it is possible that different orders will have slightly different discourse functions.
Figure 3: The constructional network of superlative minimum constructions.
4. Maximum constructions: Rhetorical and Evaluative sub-constructions

Maximum sub-constructions are constructions associated with superlative maximum modifiers, such as English *at most* and Hebrew *le-xol ha-yoter* 'at most' and *maksimum* 'maximally/at most'. The maximum sub-constructions analyzed in section 4 have a distinct argumentative discourse function. I mainly focus on the Rhetorical and the Evaluative constructions, which (i) introduce the strongest counter-argument against the speaker's main point, while at the same time, they (ii) construe it as insufficient to invalidate it. The Evaluative construction is further restricted in that some action which may result in an unfavorable outcome should be performed anyway, because the worst outcome is actually not that bad. In what follows, I expand on the two sub-constructions (sections 4.1 and 4.2), and propose a diagnostic for their argumentative function, in the form of a concessive conditional paraphrase (section 4.3). I follow with an examination of the discourse profiles of the Hebrew maximum modifiers (section 4.4), and conclude with a discussion of the relations between the sub-constructions (section 4.5).

4.1 The Rhetorical maximum sub-construction

4.1.1 The Rhetorical maximum sub-construction and argumentation

(12), repeated here as (55), is a typical example of the Rhetorical maximum construction:

55. ma lanu, yelidei ha-arec, ve-le-alilot dam? le-xol ha-yoter lamadnu alehen be-vet ha-sefer,înanu et ha-pratim ve-katavnu alehen tʃuvot ba-bxinot.

“What do we, native-born Israelis, have to do with blood libels? *At most*, we studied about them in school in history class, memorized their details and took exams about them.”

The main point of the writer of this passage is that young Israeli Jews do not see the relevance of historical blood libels against Jews to their own lives (henceforth, the speaker's argument). But then, *le-xol ha-yoter* ‘at most’ introduces a counter-argument, namely, that native-born Israelis did study about blood libels at schools, and hence, may very well know about them (henceforth, the
counter-argument). My point is, however, that since this counter-argument is introduced within the Rhetorical maximum construction, it is understood as an insufficient argument against the conclusion advocated by the writer. Moreover, since the counter-argument is introduced as 'maximal', it is the strongest counter-argument available against the speaker's argument. All in all, since the strongest counter-argument against the writer’s point is insufficient, the original speaker's argument is not invalidated, although it may undergo some weakening.

The following examples support my claim that Rhetorical maximum constructions introduce the strongest counter-argument against the speaker’s main point, while marking it as insufficient to counter the speaker/writer’s original point. Note the infelicity of the examples in (56). (56a) is inappropriate, because the argument introduced by at most is difficult to construe as a counter-argument to the conclusion that the speaker wishes to establish (the first utterance). When candidates announce that they will not run for presidency, they naturally don’t get elected. (56b) is inappropriate, because while the argument introduced by at most is a counter-argument, it is a very strong one, since typically, when no physical evidence points to some conclusion, it’s a good indication that that conclusion does not hold.

56. a. ~ ?? Trump will not be re-elected. At most, he will announce that he is quitting the race before the elections.
   b. ~ ?? The earth isn’t round. At most, no physical evidence leads to that conclusion.

Of course, the inappropriateness of these examples only holds in a world that follows the same rules our world follows (or, more accurately, the rules we believe that our world follows). (56a) would be perfectly acceptable in a context where presidential candidates usually announce that they quit the race, but end up being elected anyway. The point here is that argumentation and argumentative operators relate to the way we cognitively organize our reality, and do not strictly depend on objective facts and truths.
4.1.2 The Rhetorical maximum construction as part of a larger constructional schema

As I've briefly mentioned in section 1.3, the Rhetorical maximum construction is the second part of a complex construction, where the maximum modifier serves as a connective between the two parts. The first part is an argument in favor of a conclusion promoted by the speaker\(^\text{15}\), and contains a negative assumption, marked either overtly (57) or implicitly (55). Even when the formulation is seemingly non-negative, as in (58), it gives rise to a negative inference (in this case, that the question cannot be answered)\(^\text{16}\).

57. **eftax be-gilui naot**: me'olam lo cafiti be-perek male mitox toxnit re'aliti, vada'i lo be-sidrat re'aliti bimlo'a. **le-xol ha-yoter** zaxiti lis pog min ha-or be-hit'akvut jel kama dakot be-misgeret zipzup ne'edar taxlit. […] lamrot zot, gam tipus yav'ufi ve-
"old faʃend" je-kamoni eino yaxol lehit'alem me-tofa'at toxnjot ha-re'aliti […] ha-
mifšaltot al ha-masax ve-al ha-si'ax ha-isra'eli.

"I'll open with a disclaimer: I've never watched a complete episode of a reality TV show, let alone a complete series. **At most**, I was fortunate to be enlightened by it by pausing for a couple of minutes while aimlessly flipping through channels. […] Despite that, even a boring old-fashioned guy like me can't ignore the phenomenon of reality shows which have taken over the screen and the Israeli discourse."

58. **ha-avana ki tʃuva la-ʃe'ela ma garam la-ʃo'a […] hi me'ever le-hasagat ben enoj**, ve-ki yedi'a musmext be-inyan ze rexoka hi me-itanu, hofexet yoter ve-yoter le-naxalat rabim. **le-xol ha-yoter** yexolim anu lehaebi'a al sibot efʃariyot.

"The realization that the answer to the question on what caused the holocaust is beyond human capacity, and that definite knowledge of this matter is far from us, is becoming more and more accepted by many. **At most**, we can point out possible reasons."

\(^\text{15}\) Although it may also introduce the conclusion itself.

\(^\text{16}\) A possible reason for this is that the Rhetorical construction is part of a larger argumentative structure, in which the speaker's main point is opposed to an assumption which is salient in the discourse.
In (57), the writer aims to illustrate the strong impact of reality TV on Israeli culture, as a justification for his choice to write about it. The argument he puts forth in the first part of this passage is that he is unfamiliar with this kind of TV shows. He begins with an argument in favor of that conclusion – that he has never even watched a single complete episode of a reality TV show. Le-xol ha-yoter ‘at most’ then presents a potential counter-argument – that he did watch parts of a reality TV show. This is a counter-argument because it supports the opposite conclusion, namely that the writer is actually familiar with this phenomenon. But then, the whole point of the Rhetorical construction is that the counter-evidence (watching a couple of minutes here and there) is insufficient to counter the original conclusion.

(57) also demonstrates another feature of this construction: the tendency of writers/speakers to formulate the counter-argument in a manner that minimizes the significance of the argument in objective terms (“a couple of minutes”). This supports the writers/speakers' intention to convey that the counter-argument is insufficient. But such a minimality is by no means a necessary condition on the construction. The same effect is achieved by a more neutral formulation, as in (58). (58) is taken from a text in which the writer argues against the use of the holocaust for promoting religious agendas. The fact that it is impossible to have a profound understanding of the holocaust supports this conclusion – if one cannot fully understand some phenomenon, one can’t use it to argue for their position. The writer then proceeds to argue against their own position, that one can point out possible reasons (the counter-argument). However, once again, the conclusion supported by this argument is rejected, since the argument itself, although the strongest argument for it, is insufficient to refute the original speaker's argument.

Summing up, using the Rhetorical maximum construction, speakers introduce an argument in favor of a conclusion they wish to establish, typically a negative assumption. A potential counter-argument is then introduced, headed by the superlative maximum modifier. While this argument is construed as the strongest counter-argument, it is at the same time construed as insufficient to actually counter the speaker’s main point. Taken as a complete argumentative step, the maximum construction offers a strategy to defend the speaker's argument against a potential counter-argument.
4.2 The Evaluative maximum sub-construction

The final construction I discuss in this thesis is the Evaluative maximum sub-construction, illustrated by (13), repeated here as (59):

59. hiʃļaxreru me-ha-tfisa lefiha kir xayav lihiyot lavan ve-haxnisu kcat ceva la-xa'im. maksimum, tamid efʃar licbo'aʃuv axar kax.
   “Let go of the thought that a wall must be white, and introduce some color into your life. Maximally (=Worst case scenario), you can always paint it again later.”

The Evaluative maximum construction introduces a negatively evaluated event. This event is construed as the worst possible outcome of some action or event endorsed by the speaker/writer, but at the same time, it is also construed as not bad enough to deter someone from preforming that action. In (59), the writer is trying to convince their audience to paint their walls in a color other than white (the argument), an unconventional action which may bring about unwelcome implications. Maksimum then introduces the worst possible outcome – having to re-paint your walls. However, this outcome is also construed as insufficient to counter the writer’s main point: The potential pros of painting one's walls in a non-standard color outweigh the potential bad outcome. As a whole, then, the Evaluative maximum construction is used to justify the speaker's recommendation for action.

The Evaluative construction retains the argumentative function of the Rhetorical construction in that it introduces as insufficient a counter-argument against some conclusion that the speaker/ writer wishes to establish in the discourse. But the Evaluative construction is specialized. Note that the argument introduced in the Rhetorical construction in (57), for example, is neither negatively evaluated, nor is it an outcome of some action. But the Evaluative construction is restricted to introducing negatively evaluated potential outcomes of some action the speaker supports.

In sum, when speakers use the Evaluative construction, they first introduce an event or an action, which they promote (the argument). The maximum modifier then introduces an event which is the most negative potential outcome of the action promoted by the speaker (the counter-argument). This event, however, is not construed as bad enough to count as a sufficient argument.
against preforming that action. The speaker’s recommended action is then justified by the fact that the worst possible outcome is not remarkably negative.

4.3 Argumentative insufficiency of counter-arguments

4.3.1 Argumentative insufficiency of counter-arguments and concession

I propose that a useful diagnostic for identifying the kind of argumentative function that the Rhetorical and Evaluative maximum sub-constructions present is paraphrasing the utterance as a concessive conditional, specifically a conditional of the form even if $p$, $q$. In such concessive conditionals the antecedent $p$ is generally considered sufficient (even by the speaker) to actually counter the conclusion $q$. Nevertheless, the speaker's point is that despite the fact that the antecedent holds, which would lead one to expect the consequent to not follow, it does follow (Dancygier, 1988). In (60), the antecedent, *it will rain tomorrow*, is normally a sufficient condition for deciding *not* to go hiking, but despite that, the speaker asserts that they will go hiking.

60. ~ Even if it rains tomorrow, we’ll go hiking.

(Dancygier, 1988, example (3))

In other words, a condition which is potentially sufficient for some conclusion, is construed as insufficient. We can take advantage of these characteristics of concessive conditionals to diagnose the argumentative function expressed by the Rhetorical and Evaluative maximum sub-constructions. The constructed conditional will introduce the argument modified by the maximum expression as an antecedent. This is because the two share the same argumentative function (of introducing an insufficient argument). The speaker/writer’s main point will instantiate the consequent, which prevails despite the fact that the counter-argument in the consequent also holds.

I exemplify this test in (61), where the writer talks about the transfer of the goalkeeper Vincent Enyeama from the Hapoel Tel Aviv soccer team, to its longtime rival Maccabi Tel Aviv:
“Hapoel Tel Aviv fans are mad, they are calling him (Enyeama) a traitor, they promise that they will never forget what he did. I only feel longing and concern. I will be sad to see him thriving in the Maccabi Tel Aviv uniform in the Premier League, it will hurt me when he will keep stopping our strikers time and again, and win the derby as he usually does, but I don’t have any anger in me, I won’t wish for him to fail, at most I will entertain the hope that he will not stop some goals through no fault of his own.”

The writer of this passage indicates that unlike other Hapoel fans, she doesn’t have strong negative feelings about Enyeama’s transfer to the rival team (the argument). She concedes that she does hope that he will fail to block some difficult goals (though not by his own fault) (the counter-argument), but this is insufficient to counter her main claim. Reformulating her words as a concessive conditional in (62) results in a faithful and coherent report of her utterance.

~ Even if I hope that Enyeama will not stop some goals through no fault of his own, I don’t have strong negative feeling about his move to Maccabi Tel Aviv.

Concession constitutes a specific type of argumentation. Using a concessive construction, the speaker presents an unfavorable argument for their point, or even a counter-argument. This rhetorical strategy eliminates potential unfavorable intervention from the addressee on one hand, and assists the speaker in gaining credibility, as they show themselves as having weighed all possible pros and cons before reaching their conclusion (Robrieux, 1993; Azar, 1997).
4.3.2 The Scalar maximum construction and argumentative insufficiency

Interestingly, a minority of the tokens in my sample, which first appeared to be Scalar, actually pass the concessive conditional diagnostic (8.5% for le-xol ha-yoter, 11.8% for maksimum). Let us consider one such example:

63. umot ha-olam yexolot le'ohavenu o lesenenu, ax lehaʃmidenu lo ala be-yadam me'olam, lo be-redifot ve-lo be-hatma'a. ve-lu haita hitboelelut begeder ha-effjari, ki az haya ulai be-xol zot makom lehitvake'ax ba. le'amito ʃel dayar en hi ela utopia mazika. hamon ha-ʃam ha-yehudi maʃlig be-hitboeleluto ad txum mesuyam – hu mekabel min ha-amim ʃer misaviv lo le-xol ha-yoter et ha-txunot ha-xiconiyot: ha-levuʃ, ha-laʃon, minei ma'axalim ve-inyanei derex erec axerim. be-ruxo hu niʃ'ar zar le-tarbut svivato.

"The nations of the world can love us or hate us, but they have never succeeded in destroying us, not by persecution nor by assimilation. If assimilation had actually been possible, there would have been a reason to discuss it. In truth, assimilation is nothing but a harmful utopia. Most of the Jewish people assimilate to their surroundings only to a certain extent— they adopt from the nations around them at most the external characteristics: the clothing, the language, the cuisine and other matters of politeness. In spirit, they remain estranged from the culture of their surroundings."

Le-xol ha-yoter here modifies a phrase, on the basis of which a scale is constructed, comprising of indicators for religion and ethnicity. These are ranked according to how indicative they are of someone belonging to some group. So, if one adopts only the external features of a group they are not considered much of a member of that group, as compared with someone who also internalizes that group’s way of thinking. This fits the Scalar maximum sub-construction's profile.

However, there is an additional argumentative function here, which is absent in typical Scalar examples. Here, the writer intends his audience to take into account not just the ranking of the indicators relative to each other, but also their strength when serving as arguments which support the conclusion that the Jewish people can assimilate into their non-Jewish surroundings.
This is the conclusion opposite to that of the speaker's. Just like in the Rhetorical and Evaluative maximum constructions, however, the counter-argument (that Jews adopt the external characteristics of the nations surrounding them) is here construed (i) as the strongest counter-argument against the writer, and (ii) as insufficient to validate the conclusion it supports. If I am correct, we should be able to apply the concessive conditional diagnostic to (a simplified version of) (63). Indeed, (64) is faithful to the writer’s message:

64. Even if the Jewish people may adopt the external characteristics of the nations surrounding them, they never completely assimilate to them.

This is not a part of the conventional meaning of the Scalar construction, since it typically cannot, by itself, express concession. Trying to paraphrase the scalar (65a) as the concessive conditional in (65b) results not only in an unfaithful representation of the writer, but in an absolutely incoherent utterance. The writer explicitly indicates that the reason for Hanks' success is a direct result of his average looks.

65. a. yeʃ yoter midai anaʃim ʃe-lo barur lahem ex baxur kmo tom henks, ʃe-nir’a le-xol ha-yoter kmo texnai hatkanot yediduti egia la-pisga ve-niʃ’ar ba kol kax harbe zman.

"There are too many people who don't understand how come a guy like Tom Hanks, who at most looks like a friendly installation technician, made it all the way to the top and stayed there for so long."

b. ??Even if Tom Hanks looks like a friendly technician, he provides the viewers' need to see people they can relate to on the screen.

I suggest that the compatibility of the Scalar maximum construction with the argumentative function of introducing an insufficient counter argument can be motivated. As part of the meaning of the Scalar construction, the complement is asserted to be the maximal point on some scale. Additionally, recall that the complement is constrained in that it cannot be construed as remarkable or high. When the complement is associated with an argumentative scale, it corresponds to the
maximal point on that scale, that is, it's the strongest argument. At the same time, it's not a strong argument, as the construction imposes the construal of the complement as unremarkable. Now, usually, it is against speakers' discoursal goals to admit that their strongest argument is weak. Therefore, it is more natural to place a counter-argument as the complement of this construction.

Of course, the compatibility of the Scalar construction with this argumentative function does not entail that speakers would actually take advantage of it, nor that they will do it frequently. But the potential is definitely inherent to the construction. We then see that even a construction that appears to have an objective meaning, aimed at describing an objective reality, may be mobilized by speakers for pursuing argumentative goals.

### 4.4 The discourse profiles of the maximum modifiers

Section 4.4 examines the discourse profiles of the two Hebrew maximum modifiers, *le-xol ha-yoter* 'at most' and *maksimum* 'maximally, at most'. One potential difference between the expressions could be the type of scale associated with the expressions in the Scalar construction. But Table 16 shows no such difference with respect to conventional versus ad hoc scales ($\chi^2(1, N = 211) = 0.127, p=0.72)$:

<table>
<thead>
<tr>
<th></th>
<th>Conventional scale</th>
<th>Ad hoc scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>le-xol ha-yoter</em> 'at most'</td>
<td>67.9% (93)</td>
<td>32.1% (44)</td>
</tr>
<tr>
<td><em>maksimum</em> 'maximally/at most'</td>
<td>70.3% (52)</td>
<td>29.7% (22)</td>
</tr>
</tbody>
</table>

**Table 16**: Types of scales for the Scalar construction.

Next, Table 17 shows the overall frequency of each construction for each maximum expression. First, both expressions, are mostly used in the Scalar construction, although *le-xol ha-yoter* shows a stronger preference here ($\chi^2(1, N = 266) = 4.627, p<0.05$):

<table>
<thead>
<tr>
<th></th>
<th>Scalar</th>
<th>Rhetorical</th>
<th>Evaluative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>le-xol ha-yoter</em> 'at most'</td>
<td>83.5% (137)</td>
<td>14.02% (23)</td>
<td>2.44% (4)</td>
</tr>
<tr>
<td><em>maksimum</em> 'maximally/at most'</td>
<td>72.5% (74)</td>
<td>0.98% (1)</td>
<td>26.47% (27)</td>
</tr>
</tbody>
</table>

**Table 17**: The distribution the constructions per expression
However, there are significant differences with respect to the preference of the two modifiers to serve the Rhetorical versus the Evaluative constructions: *le-xol ha-yoter* is much more associated with the Rhetorical construction ($\chi^2(1, N = 266) = 13.035, p<0.01$), while *maksimum* is much more associated with the Evaluative construction ($\chi^2(1, N = 266) = 35.274, p<0.01$). Indeed, *maksimum* is so strongly associated with this construction, that its complement may be left out (under certain circumstances), and the utterance can still convey the general point expressed by the Evaluative construction:

66. ~ kedai lax lenasot lehagiʃ bakaʃa le-grant. **maksimum**…
"You should try and apply for this grant. **maksimum**…"

Note that a counterpart Evaluative *le-xol ha-yoter* is less acceptable:

67. ~ ?? kedai lax lenasot lehagiʃ bakaʃa le-grant. **le-xol ha-yoter**…
"You should try and apply for this grant. **le-xol ha-yoter** …"

Summing up, the discourse profiles of the two Hebrew maximum modifiers account for some of the variations between them. The significant difference between them pertains to their differential association with the sub-constructions: *le-xol ha-yoter* is more strongly associated with the Rhetorical construction, and *maksimum* with the Evaluative construction. These discourse profiles may indicate an ongoing process of specialization for each expression for a specific sub-construction.

4.5 The relations between the maximum sub-constructions

The constructional network of superlative maximum constructions is presented in Figure 4. In the case of maximum constructions, the parent construction is the *superlative maximum construction*, which is abstract and indicates that the maximum modifier takes a complement, and asserts that the complement is the upper bound of a scale, as well as being unremarkable. This meaning is inherited by all sub-constructions. In the case of the Scalar construction, this meaning is inherited as is, the only difference being that the complement must be phrasal. In that, the Scalar sub-
construction constitutes an instance of the superlative maximum construction. Moving to the Rhetorical and Evaluative constructions, the type of scale is restricted to an argumentative scale, and the remarkability of the complement manifests itself in the form of argumentative insufficiency. Also similarly to minimum constructions, other upper-bounding constructions exist, each with a different array of argumentative, and other functions.

The Rhetorical construction is also an instance of the abstract maximum construction. The complement slot is restricted to clausal complements, and the scale it is related to is an argumentative one. The Evaluative sub-construction is an even more specified instance of the Rhetorical one, and while it has the same surface structure, it is restricted to introducing an event which is the worst potential outcome of some action. Additionally, it has a special discourse role, as a conventional formula of convincing one's addressee that some action is worth doing.
Figure 4: The constructional network of superlative maximum constructions.
5. Discussion and conclusions

This thesis has examined the conventional discourse roles, mostly argumentative ones, associated with minimum and maximum constructions. In this final section, I first compare the minimum and maximum constructions analyzed in this study, and argue that despite their seemingly opposite meanings, they ultimately serve the speaker similarly, in that they are all used for constructing non-optimal arguments (5.1). I conclude this thesis with section 5.2.

5.1 Comparing minimum and maximum constructions

The aim of this section is to combine the analyses of the minimum and maximum constructions, and to argue that all in all, despite their apparent opposite meanings, they ultimately serve speakers in the same way. I claim that both are used to construct non-optimal arguments in favor of the speaker's point. Now, recall that an optimal argument should be a (i) strong and (ii) positive argument in favor of the speaker's point. But using a minimum construction, the speaker concedes that she can only offer a weak argument to support her point (contra i). Using a maximum construction, all the speaker does is assert that a counter-argument against her point is insufficient (contra ii). Each of the three following sub-sections presents a side-by-side comparison of the sub-constructions.

5.1.1 The Scalar sub-constructions

As argued in chapter 2, the Scalar sub-constructions inherit the scalar properties of their more abstract parent constructions, together with their argumentative functions. For the minimum Scalar construction, this function is presenting its complement as pertaining to a not unremarkable value. For the maximum construction, it's the exact opposite, of framing the complement as low or unremarkable. These properties of both constructions are compatible with the argumentative functions of the other constructions in the family, which is only reasonable if we consider that this construction is arguably the most literal and basic construction, as well as the closest in meaning to the abstract upper bounding construction, which is plausibly the source for the other constructions.
5.1.2 The Rhetorical sub-constructions

The Rhetorical minimum construction introduces a weak yet sufficient argument for the speaker's point, while the Rhetorical maximum construction introduces a strong (or even the strongest) argument against it. While at first glance these two argumentative functions seem to be opposites, they end up serving speakers in the same way: in both cases the speakers concede that their arguments are not optimal, but nonetheless, their main point still holds. With the Rhetorical minimum sub-constructions, the speaker concedes that a stronger argument might not hold, and with the Rhetorical maximum construction, she concedes that there is a strong argument against her own point. At the same time, the weak argument introduced by the Rhetorical minimum sub-constructions is construed as sufficient to validate the speaker's main point, while the strong counter-argument introduced by the Rhetorical maximum construction is construed as insufficient to counter the speaker's point.

The comparison between the two constructions is summarized in Table 18. While they are opposites with regards to every feature appearing in the leftmost column, the final result is the same – the speaker's main point is upheld.

<table>
<thead>
<tr>
<th></th>
<th>Rhetorical minimum</th>
<th>Rhetorical maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argumentative orientation</td>
<td>In favor of the speaker's main point</td>
<td>Against the speaker's main point</td>
</tr>
<tr>
<td>Strength of the complement argument</td>
<td>Weak</td>
<td>Strong</td>
</tr>
<tr>
<td>Is the complement argument sufficient to establish the conclusion it supports?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Does the speaker's main point ultimately hold?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 18: Rhetorical minimum and maximum.
5.1.3 The Evaluative sub-constructions

The maximum and minimum Evaluative sub-constructions also present an interesting parallelism. First, the Evaluative minimum sub-construction introduces a positively evaluated event, while the Evaluative maximum sub-construction introduces a negatively evaluated event. The positive event is sufficient for the evaluation of the overall situation as somewhat positive (we are left with a "better than nothing" feeling), which is in line with the speaker's communicative and argumentative goals. The negative event in the maximum construction, in contrast, is insufficient to counter the speaker's goal, which is to establish that some action is worth doing. Note that if the negative event will end up materializing, we once again end up in a sub-optimal state of affairs. The comparison is summarized in Table 19.

<table>
<thead>
<tr>
<th></th>
<th>Evaluative minimum</th>
<th>Evaluative maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stance towards the event denoted by the modifier's complement</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Argumentative orientation</td>
<td>Against the speaker's main point</td>
<td>In favor of the speaker's main point</td>
</tr>
<tr>
<td>Scalar orientation of the event</td>
<td>Minimal</td>
<td>Maximal</td>
</tr>
<tr>
<td>The speaker's ultimate evaluation of the event</td>
<td>Not as negative as expected</td>
<td>Not as negative as expected</td>
</tr>
</tbody>
</table>

Table 19: Evaluative maximum and minimum.

Once again, what we have are two constructions with opposite, yet parallel functions. And once again, by using these constructions the speaker indicates a non-optimal state of affairs. In the minimum construction, it's an undesirable state of affairs, but with a silver lining which suffices to evaluate the entire situation as minimally positive. In the maximum construction, it's a negative result of some action, which is nonetheless construed as only minimally negative.

5.2 Concluding remarks

A summary of the features of the minimum and maximum constructions discussed in this study is provided in Table 20 and Table 21, respectively:
This study joins a growing body of research which highlights the crucial role of argumentation in natural language. The argumentative functions I focused on pertain to non-optimal arguments speakers have to resort to sometimes. As I argued, this function actually characterizes both superlative maximum and minimum constructions, which testifies how prevalent such interactional situations must be. In addition to the maximum and minimum constructions, other constructions have been highlighted in this study as introducing non-optimal argumentation, such as Concessive Repair, and but conjunctions.

Table 20: Summary of minimum constructions.

<table>
<thead>
<tr>
<th>Scalar meaning</th>
<th>Modifier scope</th>
<th>Argumentative function</th>
<th>Event type of argument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalar</td>
<td>Complement is a minimal point on a scale</td>
<td>Phrasal</td>
<td>The complement is contextually significant</td>
</tr>
<tr>
<td>Rhetorical</td>
<td>Argument is a minimal point on a scale</td>
<td>Sentential/phrasal</td>
<td>Replacing an overstated strong argument for the speaker's point, with a weak, yet sufficient one.</td>
</tr>
<tr>
<td>Evaluative</td>
<td>Argument is a minimal point on a scale</td>
<td>Sentential</td>
<td>Introducing a minimally positive event to justify the speaker's evaluation of a non-optimal state of affairs as positive</td>
</tr>
</tbody>
</table>

Table 21: Summary of maximum constructions.

<table>
<thead>
<tr>
<th>Scalar meaning</th>
<th>Modifier scope</th>
<th>Argumentative function</th>
<th>Event type of argument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalar</td>
<td>Complement is a maximal point on a scale</td>
<td>Phrasal</td>
<td>The argument is not contextually significant</td>
</tr>
<tr>
<td>Rhetorical</td>
<td>Argument is a maximal point on a scale</td>
<td>Sentential</td>
<td>Strongest insufficient counter-argument</td>
</tr>
<tr>
<td>Evaluative</td>
<td>Argument is a maximal point on a scale</td>
<td>Sentential</td>
<td>Strongest insufficient counter-argument</td>
</tr>
</tbody>
</table>
Additionally, this study illustrates the importance of looking at naturally occurring data for linguistic research. Besides the important information we can obtain by looking at distributional patterns and discourse profiles, examining large contexts enables us to extract generalizations which cannot be observed by looking at single sentences. For example, by examining standalone sentences which can be classified as Rhetorical minimum constructions, we can easily miss their crucial role as argumentative operators.

Future research is called for, in order to identify additional modifier constructions which speakers mobilize for their argumentative discourse goals, and specifically those pertaining to nonoptimal arguments, in order to explore additional respects in which (counter-)arguments may be construed as nonoptimal.
References


Ariel, M. (in preparation) ‘Repair and trailing or’, *Tel Aviv University*.


Horn, L. R. (1972) *On the Semantic Properties of Logical Operators in English*. UCLA.


The current study focuses on constructions (Goldberg 1995; 2006) associated with expressions of minimum and maximum (such as at least and at most). While these expressions have received much attention in the research literature, the focus of most research has been on their formal properties. My goal in this research is to examine their interplay, more specifically, their role when speakers use them to construct arguments for their points.

The current study shows that, despite their superficial meaning, even scalar constructions have an intercative function, and as such, they are actually intersubjective. The scalar construction of minimum forces the complement to be interpreted as a value that cannot be considered insignificant, whereas the construction of maximum constrains the complement so that it can only be interpreted as a value without communicative significance.

The current analysis is inspired by Kay’s (1992) analysis of three related constructions associated with at least (scalar), rhetorical (rhetorical), and evaluative (evaluative): 1. Mary received calls from at least 3 soldiers. 2. At least this one’s cooked. 3. I see her every day, at least when I’m in town.

Based on data from the HeTenTen corpus, I start analyzing Kay’s construction for the scalar minimum. I identify another type of evaluative construction, which I call optative (optative). In addition, I break down the construction of maximum into three subtypes: scalar (4), rhetorical (5), and evaluative (6): least

The analysis of Kay et al. (2019) shows that we, as native speakers of this language, have learned these patterns at an early age and have incorporated them into our vocabulary.

On the one hand, the fact that the scalar construction of minimum shares the same argumentative function of presenting a weak argument in support of the speaker’s point is noteworthy. On the other hand, the central thesis of this study is that all these constructions are based on the same kind of utterance, which is characterized by its communicative value.
טענתי כי הפונקציה הארגומנטטיבית של קונסטרוקציות המקסימום היא סכ留言板ית היא הליגה את טיעון הנגד כך Benny מחשב את הפואנטה שלו, והובים לחשוב על זה כבדל מﺲ פורים באמצעות הנתונים המהונJSONArray. אני מאפיינת את פרופילים של דיסкурס דובריים (Ariel, 2008) של הביטויים בعبادה. אני מראה כי כל המקרים של ביטויים שונים ממציאיםفرق בין המילים לענין הת楽しון מופואת, של הבדלקים BINIM נוטים למחполнение שלוש לחט-קונסטרוקציה מסודר עד אף האורח, וא DSL美麗 של לחט-מופואת הקונסטרוקציה.לבסוף, טענתי כי שלמרות המשמשות הפוסטימה של הנקודה של הדוברה, קונסטרוקציות מינימום והמקסימום של דובריים בין הפואנטה של הנקודה של הדוברה, שם נמצאת לרוב בלב אופן. אני מראה כי אופי הנקודה בין הדוברות והנקודות של הדוברות. עם זאת, כארה הדוברת مضונת בין הנקודות בין הדוברות. אני מורה כי יש בישות את לר זה ביטוי חס של后来 ана sergeant לשון הנקודה.כאשר היא שלמרות בקונסטרוקציה המינימום, כשלשדוברות עשו היא תלעך כי הםebbמעום לנקודה של שון בלתי מספק (בזינמרר-לב).
ארגומנטציה לא אופטימלית: קונסטרוקציה מינימום ומקסימום

חיבור זה הוגש כעבודת גמר לקראת התואר "מוסמכת אוניברסיטה" – M.A. באוניברסיטת תל-אביב.

על יד
ניקולה קציר

העבורה הוגנה בהדריך
פרופ' מירה אריאל

יוני 2019